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ABSTRACT

The purposes of the project were to facilitate, coordinate, describe, and evaluate the activities of seven fifth-cycle Teacher Corps programs as they developed and implemented--to the extent possible--competency-based teacher education programs utilizing the ten National Center for Educational Research and Development teacher education models as a resource. Consequently, the activities carried out by the project were intended to facilitate the goals of each of the seven programs by providing for greater communication among them, by coordinating resource utilization so as to maximize productivity, by relieving programs of certain evaluation responsibilities so that their resources might be directed toward instructional aspects, and by providing certain resources which otherwise might not have been available. An examination of program development efforts suggests that the processes involved were both complex and difficult. Lack of time and money appear to be chief among the many problems encountered. Despite those problems, progress seems to be rather substantial when viewed in the light of realistic expectations. Evidence suggests that interns felt much more positively toward competency-based teacher education, the competency-based aspects of their program, and their total program than they did toward more traditional approaches to teacher education. (Author)

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THE COMPETENCY-BASED TEACHER EDUCATION DEVELOPMENT PROJECTS

Volume I of Two Volumes

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December 1971

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PREFACE

Final reports are notoriously dull. As a consequence, most are not widely read. This document represents an attempt to make a final report more interesting and, therefore, more widely read. In an effort to accomplish those two goals, this report strays from the usual format.

The first volume presents a fictitious interview which invites the reader to examine the thoughts of representatives from seven fifth cycle Teacher Corps projects as they describe their efforts to develop competency-based teacher education programs--a most difficult task. Thus, the first volume focuses on a variety of issues related to program development efforts. The description of the progress made and the problems faced is realistic; only the interview scenario is fictitious.

The second volume consists of twelve sections each of which provides information which is offered in support of statements made in the first volume. While much of the information provided here might be categorized as "soft data," it was decided that those who would examine the process of competency-based teacher education program development might profit from such information even though it might be tentative in nature. The hope of the author is that the reader will find the information--and the report--helpful.

Wilford A. Weber
Project Director

Syracuse, New York
December, 1971

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The project reported here would not have been possible had there not been a fine cooperation on the part of interns, program development specialists, and project directors in each of the seven fifth-cycle Teacher Corps programs involved. We are most thankful to each who gave so willingly to this effort.

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W. A. W.

ABSTRACT

The purposes of the project were to facilitate, coordinate, describe, and evaluate the activities of seven fifth cycle Teacher Corps programs as they developed and implemented--to the extent possible--competency-based teacher education programs utilizing the ten National Center for Educational Research and Development teacher education models as a resource. Consequently, the activities carried out by the project were intended to facilitate the goals of each of the seven programs by providing for greater communication among them, by coordinating resource utilization so as to maximize productivity, by relieving programs of certain evaluation responsibilities so that their resources might be directed toward instructional aspects, and by providing certain resources which otherwise might not have been available.

An examination of program development efforts suggests that the processes involved were both complex and difficult. Lack of time and money appear to be chief among the many problems encountered. Despite those problems, progress seems to be rather substantial when viewed in the light of realistic expectations. Evidence suggests that interns felt much more positively toward competency-based teacher education, the competency-based aspects of their program, and their total program than they did toward more traditional approaches to teacher education.

CONTENTS

VOLUME I

PREFACE	ii
ACKNOWLEDGMENTS	iii
ABSTRACT	iv
CONTENTS	v
THE INTERVIEW	1

VOLUME II

PREFACE	ii
CONTENTS	iii
LIST OF TABLES	vi
SECTION I: OBJECTIVES OF THE PROJECTS	1
Syracuse University	1
Jackson State College	2
Oakland University	2
San Francisco State College	3
State University College at Buffalo	3
Texas Southern University	4
Western Kentucky University	4
Western Washington State College	5
SECTION II: TEACHER CORPS AND COMPETENCY-BASED TEACHER EDUCATION	6
Teacher Corps Guidelines and Competency-Based Teacher Education	6
Newspaper Article	8

Memorandum from National Director	10
SECTION III: A DEFINITION OF COMPETENCY-BASED TEACHER EDUCATION	14
SECTION IV: THE EMERGING NATURE OF THE WESTERN WASHINGTON STATE COLLEGE PROGRAM	18
Introduction	18
Strengths of the Emerging Program Concept	19
Weaknesses of the Emerging Program Concept	19
Summary	21
SECTION V: PROGRAM PRIORITIES AS VIEWED IN THE WESTERN WASHINGTON STATE COLLEGE PROGRAM	22
Introduction	22
Procedures	23
Results	27
Discussion	32
SECTION VI: EXAMPLES OF INSTRUCTIONAL MODULES	36
Teacher Corps Guidelines and Instructional Modules	36
Jackson State College	37
Oakland University	46
San Francisco State College	58
State University College at Buffalo	65
Texas Southern University	72
Western Kentucky University	82
Western Washington State College	88
SECTION VII: STAFF DEVELOPMENT CONFERENCES AT THE STATE UNIVERSITY COLLEGE AT BUFFALO	98
SECTION VIII: IN-SERVICE PROFESSIONAL CONFERENCES AT TEXAS SOUTHERN UNIVERSITY	117
SECTION IX: SAMPLE MODULES FROM THE DEPARTMENT OF DESIGN AND INDUSTRY AT SAN FRANCISCO STATE COLLEGE	147
SECTION X: DESCRIPTIONS OF THE ROLE OF THE PROGRAM DEVELOPMENT SPECIALIST	156
Jackson State College	156
State University College at Buffalo	157

Western Kentucky University	160
Western Washington State College	161
SECTION XI: INTERN PERCEPTIONS REGARDING COMPETENCY-BASED	
TEACHER EDUCATION	164
Intern Comments	164
Intern Ratings Regarding Competency-Based Teacher Education .	216
Intern Attitudes Toward Teaching	225
Intern Attitudes Toward Low-Income, Minority Persons	228
Intern Perceptions at Western Kentucky University	230
Student Perceptions at Jackson State College	231
SECTION XII: SUGGESTED RESOURCES	
Books	234
Mediated Materials	235
Persons	236
Model Elementary Teacher Education Project Phase I	
Final Reports	237

THE INTERVIEW

The following is a fictitious interview. It never took place but it very well might have for while it is true that the dialogue is fictional, the information contained therein is factual. Indeed, wherever possible, supporting documentation is provided in Volume II of this report.

The interview which follows took place at the end of the project's first year in June of 1971. In attendance were nine persons: representatives from each of the seven institutions involved--Jackson State College (JS), Oakland University (OU), San Francisco State College (SF), State University College at Buffalo (BS), Texas Southern University (TS), Western Kentucky University (WK), and Western Washington State College (WW), the project's National Coordinator (NC), and the interviewer (IN). References refer to supporting documentation presented in Volume II.

IN: I'm here today with representatives of the seven Fifth Cycle Teacher Corps projects which have been involved in this past year's Competency-Based Teacher Education Development Projects sponsored by the National Center for Educational Research and Development and the National Teacher Corps. We also have with us the National Coordinator of those projects and we'll be talking about various aspects of the first year efforts. The Competency-Based Teacher Education Development Projects. That's a rather imposing title. Just what were the purposes of the project?

NC: The purposes of the project were to facilitate, coordinate, describe, and evaluate the activities of seven fifth-cycle Teacher Corps programs as they develop and implement--to the extent possible--competency-based teacher education programs utilizing the ten National Center for Educational Research and Development teacher education models as a resource. The activities of the project were intended to facilitate the goals of each of the seven programs by providing for greater communication among them, by coordinating resource utilization so as to maximize productivity, by relieving programs of certain evaluation responsibilities so that their resources might be directed toward instructional aspects, and by providing resources which otherwise might not be available.¹

- IN: How was the intent of this effort viewed by the various seven programs?
- BS: In our fifth cycle proposals we had obligated ourselves to follow the Teacher Corps program guidelines and try to make our programs competency-based. The guidelines, subsequent information from Teacher Corps Washington, and our own biases had made our goals in this regard pretty clear--we wanted to do what we could to develop a competency-based program.²
- OU: We also felt that there would be benefits to be gained from our working together and sharing certain of our products--especially instructional modules.
- WK: And the project gave us an opportunity to have a program development specialist to assist with program curriculum development and evaluation.
- JS: Yes, and it gave us an opportunity to talk to one another and discuss some of our mutual problems--and there were several common problems to discuss. And it was nice to know that there were other people in the same boat.
- IN: You make the development of a competency-based teacher education program sound like a rather difficult task. Just what is a competency-based program and what makes it so difficult to develop?
- NC: We have been using a definition which describes a competency-based program as one in which the competencies to be demonstrated by the student and the criteria to be applied in assessing the competency of the student are made explicit and the student is held accountable for meeting those criteria.³
- IN: What do you mean by competencies?
- NC: By competencies we mean those attitudes, understandings, skills, and behaviors which are thought to facilitate intellectual, social, emotional, and physical growth in children and, thus, are seen as requisite to effective teaching.
- IN: And how is that approach different from traditional programs?
- NC: Well, actually a competency-based program is different in quite a few ways. Primary among these, however, are several which are most outstanding. In the first place, a competency-based program is achievement-based, not time-based. That is, the emphasis is on a teacher education student's ability to demonstrate his achievement of specified objectives rather than the completion of a set number of courses. Secondly, the emphasis is on the student's behavior and his behavioral impact on children rather than simply what he knows. Thirdly, the curriculum consists of instructional modules rather than a course structure; this provides greater flexibility, more student choice, greater opportunity for self-pacing and alternative routes of instruction, and management by objectives. Finally, the approach is much more field-oriented with the student spending more of his time

in schools in interaction with pupils.

- WW: Our interpretation of the competency-based philosophy also places emphasis upon pupil consequential behaviors that can be expected as results of intern competencies; that is, the behaviors of children the intern has taught. The intern and teacher have a significant role in formulating these competencies. Input from the field also serves to aid in competency specification. And we believe it useful to keep in mind that individual conferences, field trips, mini-seminars, and so forth as well as more formal learning packages are broadly defined as modules. Such a definition gives greater flexibility for individualization as many learning experiences have not been and should not be formally packaged.
- IN: Those appear to be rather significant differences. What are some of the most difficult problems in developing such a program?
- SF: The first problem encountered is getting everyone on board tuned in to what competency-based teacher education is all about, to what new roles they are expected to play, and to what work has to be done. All of this implies change and we all know the difficulties involved in getting people to change--especially if they may not want to change or can't conceptualize what those changes imply.
- WW: An equally difficult problem is identifying the competencies students are expected to demonstrate. These constitute the heart of the program. It is these competencies which form the basis for instructional objectives which in turn are the foundation for instructional modules. Quite frankly, we are only beginning to get a handle on those competencies. We have established local committees composed of interns, team leaders, school personnel, community representatives, and university representatives to identify the competencies they feel interns ought to have to be effective. Thus far, this has been a rather slow process but we feel that over the long haul this process-oriented approach will pay bigger dividends than something imposed by the university people.
- OU: Another difficulty is the problems which result from trying to create a program at the same time you are responsible for the instruction of interns. You can do only so much. The result is that you keep just one step ahead of the interns.
- BS: We found the same thing. Interns expected to find a fully developed, competency-based program complete with all the options and alternatives that implies. Of necessity, during the developmental stages, the program is more linear. The number of options is smaller. The program is less individualized, less personalized. It takes time to build a program which offers all the flexibility we would like it to have.
- TS: We had the same problem but we found that interns were a bit more

patient, a bit more empathic, if they were involved in developing instructional modules for their pupils. When they discovered for themselves the hard work that's involved, they were much more understanding of the difficulties we were facing.

WW: Other problems focus around time and money. As was stated earlier, it's difficult to find the time necessary to develop a program when you're also loaded down with instructional and administrative responsibilities. And, of course, program development costs more money than we have. Everybody looks at our Teacher Corps budget and thinks we have a lot of money for program development. The truth is that the bulk of that budget is for Corpsmember salaries; there is very little, almost no, money for program development. And the budget guidelines don't allow money for program evaluation, a vital part of program development and implementation. Too often the dollars just aren't available to do what we are supposed to be doing in this regard. Perhaps it is just that the program objectives are so substantial and complex and/or present experience is so meagre. And a further problem is that there is really little agreement among the various individuals and groups involved regarding the priorities of the program. Some see better education for low-income, minority kids as the goal; for others, changes in the university curriculum is the major goal. And there are a dozen more, each strongly held by someone. That makes the notion of "unity of purpose" pretty much fiction.⁵

IN: Obviously, the problems you have faced in the past year have been many. I can understand that it is difficult enough to operate a Teacher Corps program without trying to develop a competency-based program as well, but it is also clear that all of you have made progress. How would you describe the progress you have made to date regarding the program in general and competency-based aspects in particular?

WW: I'd like to respond to that, but first I'd like to make a comment which I think holds for all of us. If you look at our progress in light of what we hoped to accomplish, our progress has been slow and not as great as we had hoped. On the other hand, if you look at what other programs are doing, then our efforts and achievements must be viewed as substantial.

BS: That's really well put. We had hoped to accomplish so much more by now but we were rather naive about the problems we'd encounter. Reality forces you to settle for smaller gains. All in all, I'd say we've made about as many gains as was reasonable to expect. Gains included the development of numerous module clusters both within and outside of the project. The establishment of a university council on competency-based teacher education and of an area-wide council including public school personnel, numerous colleges and the state education department was accomplished.⁶

TS: Having to sometimes settle for gains which are less than those expected is often necessary. We have made progress in certain

areas but this needs always to be looked at in terms of the realities you face, not the dreams you have. We have not moved as quickly as we had hoped but we are having an impact on certain of the education courses and on certain other areas of the university. We are very close to being in a position to influence future directions in the total teacher education program. If I had to single out a major accomplishment, I would say that it has been the fact that our efforts have acquainted a fairly wide-range of faculty members with the notions of competency-based teacher education, have given those notions validity, and have shown that such approaches are more effective than more traditional ones.

- WK: In general, most of our objectives have been or are being accomplished in that we feel that graduates of the program will be competent. One course conducted by a program staff member has been completely competency-based. Courses in "Methods of Teaching Science," "Methods of Teaching Social Studies," and "Tests and Measurements"--a course required for certification and required as a part of the undergraduate program--will be modularized for the fall semester. About one-hundred and fifty of our one thousand teacher education undergraduates will be involved directly in the "Tests and Measurements" modules during the coming year as a pilot project. Our major accomplishment, therefore, has been the development of instructional modules in some of the more important areas. This has been accomplished within the traditional course structure.
- OU: Our major accomplishment has also been the development of modules in certain important areas: language arts and reading, mathematics, and children's literature. To date, our module descriptions provide a basic framework which is embellished by the instructor. What might be said is that instructors have provided variations on the theme. Another accomplishment worth noting is that our program has moved largely from an emphasis on what interns know to how they behave--from knowledge to performance. And in order for this to happen, staff members have gone into the field. Consequently, there is much emphasis toward field-centeredness.
- SF: In our program, progress is very mixed. Some staff members are very knowledgeable about the notion of competency-based teacher education; others are totally ignorant. Our biggest accomplishment has been to move the Teacher Corps program from one which was entirely staff directed to one which involves interns on a parity basis in cluster development teams. Our cluster development teams are very much like the "local committees" established in the Western Washington program. Interns, team leaders, and staff work together to identify competencies and to make curricular and instructional design decisions. And as you might expect, a number of problems result from their effort to work as co-equals. The teams have as their task the specification of high priority competencies and the establishment of evaluation criteria. This was brought on by

intern resistance to being "spoon-fed" competencies and by staff dissatisfaction with traditional format and desire to move instruction from the campus to the schools. What we did was to have one staff member responsible to each school as a resource to the team leader though the team leaders still retained their positions of primary responsibility. This, however, did require some staffing changes and some additional people.

WW: That's interesting. As I suggested earlier, we came up with a very similar pattern of organization and function. Our local committees are composed of interns, team leaders, building principal, community representatives--which might include a school board member and/or a city council member, and a field representative from the college. In the beginning, they were primarily concerned with evaluating intern progress. Out of that concern has grown a need to specify appropriate teaching competencies. Consequently, we are in the middle of trying to find out if interns, school people, and community representatives can develop individualized programs focused on the development of specific competencies in interns. We are testing that process--a process we feel holds long-range promise. This is what we mean by "emerging program." We have made moderate progress in terms of our goals. It is a slow, developmental process but we're optimistic.

OU: We also found that there was a great deal to be gained by having university personnel on site--field representatives. This has been particularly crucial to our efforts to have the bulk of the instructional program in the schools. And we, too, have an advisory group composed of university faculty, public school personnel, community people, and students to provide inputs and feedback regarding competency-based instruction. A committee exists at the university to evaluate and revise the undergraduate teacher education curriculum. The Teacher Corps competency-based program has made important inputs to this committee.

JS: We've made relatively fair progress. We were hampered by one rather serious problem--the staff members who were assigned instructional responsibilities were assigned too late to allow for adequate staff development prior to the beginning of the program. Consequently, we were never fully able to use a task force approach; we had to work with each instructor on an individual basis. In spite of this, we did make some very substantial gains. Interns feel quite positive about the competency-based approach; they like having had the opportunity to "test out" in much of their work. In those areas where other students--both undergraduate and graduate--have experienced competency-based instruction the reactions have been the same--positive. Our experimental component is the closest thing to an all-out competency-based approach. A big problem that remains is the question of identifying the competencies and the criteria. We are all troubled by that problem.

- BS: We have had as much progress as might be expected in a program where we were involved in both development and implementation at the same time. There were parts of the program which we didn't get going in modular form but not because people didn't want to. Many persons were positive about the competency-based approach but simply couldn't find the time to get modules firmed up. We feel we're doing about as well as we can but it's tough when you have instructional responsibilities too. Our major accomplishment might be viewed as the progress we have made in getting a large portion of faculty involved. We have moved toward a differentiated staffing model involving a media specialist and we feel that will prove to be quite effective. Also, we have had a very positive effect on the thinking of the state education department regarding competency-based certification as an alternative to a course credit approach. We feel very positive about the direction certification is taking and hope increasingly to be a major part of that movement. As mentioned earlier, we saw the formation of an "All University Study Committee on Competency-Based Education" and of the multi-institutional organization as other very positive steps.⁷
- TS: The successful field testing of the Northwest Regional Laboratory's Research Utilizing Problem-Solving model is another major accomplishment in our program. We found the training program to be very worthwhile for our team leaders. They had positive attitudes toward the training and found it profitable. And another interesting by-product of our program came about through several all-university conferences on competency-based teacher education; these were cooperatively sponsored with our TTT, Basic Studies in Language Arts, and Basic Studies in Mathematics programs. This had the effect of increasing Education's image on campus. There have been a number of spin-offs as other areas--the Mathematics Department, Secondary Education, the Basic Studies Program, the TTT Program, the Upward Bound Program, for example--have all begun to develop instructional modules.⁸
- SF: We have also had some interesting spin-offs; indeed, one may seem to some to be a bit unusual. A course in instructional technology in the College of Industrial Arts has been modularized.⁹ It has been very well received. And in Elementary Education, several courses which are being taught by former Teacher Corps instructors will be both field-centered and competency-based in the fall.
- JS: Our spin-offs have also been substantial. Some of the staff members who were involved in the Teacher Corps instructional program have utilized the same approach in their regular undergraduate and graduate instruction. These courses include undergraduate reading and history of education as well as graduate educational research and statistics. The reactions of the students were quite favorable toward competency-based instruction. This impact on the regular program may have been greater if some of the instructional staff had not been visiting instructors and

professors. In addition, in the School of Liberal Studies aspects of both the mathematics and sociology curriculum are being modularized. And we presently have underway a master's thesis which is looking at learner perceptions of competency-based instruction.

IN: It sounds as though you have all been busy and have made some significant gains. As you have worked at developing your programs, I'm sure you have learned many things which it would be profitable to share with others attempting to do the same sort of thing. What kinds of things of this nature have you learned?

JS: Let me get started by presenting some of the internal and external factors which may hamper this type of program. It is very important to get instructional staff on board early, to get them tooled up and involved as quickly as possible, and to provide them with opportunities to interact with one another--something like a task force approach. A point which is worth emphasizing is that staff development is crucial. You must take the time to train them and see that they can work together with a common frame of reference. And it's a pretty good idea to make sure the local school district people are tuned in and are aware of their responsibilities in a field-centered program. Another thing we learned with regard to an efficient and workable competency-based program is that you need a commitment to change from the college administration and state department of education. Both must agree--and it must be a joint commitment--to work toward changing certification requirements to allow certification of students who do not follow a traditional curriculum and grading system. Institutional limitations and red tape can handicap your program. Registration procedures, required courses, and the grading system in a traditional situation do not readily lend themselves to a competency-based approach. We are unable at this point to operate on a pass-fail basis; we are still tied to a traditional grading system. And I'm sure we could go on and on about the problems state certification requirements can cause. We are forced to move within the parameters which exist. That is often very frustrating and changes are sometimes slow--too slow.

WK: We'd like to echo one of the points just made. We also learned that it is important to have instructional personnel--and instructional program--sufficiently organized and developed prior to the involvement of interns. Once program is underway, it's tough to stay ahead of interns. We too learned that you need to get the program squared away with the public school people, well prior to the beginning of the internship. This is a new ball game with new rules and they had better be clear about the training role the school and team leaders will be required to play. And one of the most important lessons we learned was the importance of feedback. If one were to have looked at our program last November, he would have found a program which was in rather serious trouble. Some interns described it as a program in which "there wasn't even good traditional instruction." However, we

managed to get ourselves turned around because the program development specialist and his crew had been collecting information on intern perceptions and fed that back to those responsible for program development. We were able to use that information to modify our program in light of expressed intern needs. I would make a strong pitch for a program setting up mechanisms which would give the staff access to such information on a regular basis. I don't think you can put too much stress on getting--and using--feedback from interns, school, and lay personnel.

OU: We've learned quite a bit, too. We've learned a lot about modules. For example, we found that each module needs to be reinterpreted--indeed, somewhat redesigned--for individual interns in the field. We also learned that we hadn't provided sufficient instructional alternatives. And we found that monitoring intern progress was especially difficult. Management and logistical problems were sometimes overwhelming. We also learned that in a field-centered approach the team leader is a most important person. He needs to be carefully selected--and trained. And finally we discovered that the instructional staff needs more time as a task force to plan and to evaluate program progress.

TS: We've learned that technical assistance is very important. No one on campus was experienced and we had to educate our faculty to these new approaches. Under the circumstance, then, we had a lot of wheel-spinning. Anyone who gets into this kind of thing ought to expect it and learn to live with it. Wheel-spinning is just plain unavoidable, it seems. Another thing worth keeping in mind is that it is probably a very rare situation where you get 100 percent of the faculty to "buy" the notion of competency-based instruction. You just have to accept the fact that some people will fight change and you need to resign yourself to "putting your money on the horses who are going to run." And as some of the others have already mentioned, make sure everybody, and I mean everybody, is well informed about all aspects of competency-based instruction. Everyone needs to be thoroughly familiar with the concept--and the role he is expected to play.

BS: A major lesson we've learned is that the program development specialist must provide a supportive environment for faculty who are trying to develop modules. He must "hold their hands" when they need it; he must be available and he must keep them focused on the task. In this regard, we have found that the program development specialist is an absolutely necessary resource. His efforts are crucial to program success. A suggestion we would make would be to have instructional staff operate in six or eight member teams rather than each acting as an individual doing his own thing. And, finally, we found that faculty needed to be encouraged to let students go at their own pace and on their own; there was a tendency to want to control more directly than perhaps necessary.

- WW: One of the most important lessons we learned was that interns need to have first-hand, in-school experiences before they can see the worth of the competencies they are expected to demonstrate. They are, for example, very reluctant to "manage instruction by objectives" until they begin to try to have an effect upon the kids they are teaching. One has to recognize that this is an inductive operation in many ways. Of course, this is all further complicated by the fact that we know very little about the competencies to be trained for--we know very little conceptually or theoretically. So what happens then is that we make value judgments about what competencies are important and a process intended to be quite objective is muddled by subjectivity. How do you decide what is important? That's what we are trying to get at now. Also, we feel that those attempting this approach need to recognize the importance of the team leader. He is crucial. And you also need to view the composition of teams as being rather important. During preservice, there need to be opportunities for interns to get to know each other and the team leaders. Lastly, one needs to make a distinction between recruiting interns for the program and recruiting for the internship. We recommend that the university screen applicants and decide who is eligible and then local committees select for their school from those eligible.
- OU: That's the selection procedure we used and we found it quite successful for our purposes.
- SF: I guess we'd agree with most of what has been said but would add a thing or two about the program development specialist. His role needs to be very carefully defined prior to the beginning of the project. He must know what his role is to be, what responsibilities he will have, and what limitations there are. In short, he needs to know what shots he can call. We'd suggest that he be freed of administrative responsibilities, that he feel comfortable in the schools, and that he work with both faculty and team leaders so that they can reinforce his efforts. Yes, and we have also learned that there needs to be a clearer set of guidelines from Teacher Corps Washington so that progress can be assessed; this needs to be done without having procedures mandated. We need to have products carefully defined so that we can be held accountable for outcomes, not processes.
- IN: Several times now references have been made about the program development specialist. Just what is the program development specialist and what is his role.
- BS: He plays many roles, but we see the program development specialist as a catalytic agent who is responsible for bringing about change on the campus and in the surrounding education environs with that change being in the direction of competency-based teacher education. His role includes presentations, conferring, influencing, helping to write and implement module clusters, and the distribution of those clusters.¹⁰

WW: As we view it, determining what the program development specialist should do is a matter of choosing a subset from a wide variety of tasks--and having sufficient foresight to choose those which will actually contribute to a program that inevitably changes as it goes along. Module development and module management are obvious task areas for a competency-based program--these are best considered two types of tasks with module management being concerned with intern needs assessment, timing, and arranging for supplementary materials. Along this line, a program might well consider an arrangement used by the Teacher Corps program in Eastern Montana. They use a graduate assistant to do a lot of the work in module management. If work in these two areas is to pay off, the program development specialist had better keep in close touch with the program and diagnose readiness, attitudes, and conflicting priorities pertaining to modular instruction. This leads into two other possible and probably essential tasks of the program development specialist. One is selling and explaining modular instruction to Corpsmembers and program staff as needed. This is a more difficult process if modular instruction is narrowly defined to exclude short minicourses or seminars which lack behavioral pre and post tests. The other task is to get constant feedback from the program, the importance of which was stated earlier. This is a whole collection of tasks. Feedback may include information about attitudes and readiness for modular instruction or about current levels of intern competence; or it can also focus on specific needs in the schools, on community opinions, or on opinions of key persons in the college's power structure. Or the feedback task can be organized strictly to serve the purpose of giving direction to general program management. Feedback enables the identification of many potential troublespots before they become trouble. Another major possible task for the program development specialist is designing and helping to operate a general management system. Here, to be effective, he must be very closely in tune with the program director about the nature and degree of system formalization. The program development specialist can also work on communicating Teacher Corps experiences and discoveries to other programs and facets of the college--such as by getting faculty involved in local committee processes; in our college, he managed a separate module writing project which capitalized on Teacher Corps experiences. In our project, an additional task of the program development specialist--as well as all program staff--is to work with the local committees as they determine needs, provide direction, and define competencies for an emerging program. This means diagnosing the committee's operation and trying to provide use input when needed. There may be other tasks; which ones are chosen should depend upon the unique nature of a particular program and its staff.

OU: The interpretation given to the role of the program development specialist at Oakland University is necessarily broad. He has a role in modular development within each discipline. In this capacity, he can provide a common means of assessment, a common

framework for modular development and, most importantly, he can design a management system which incorporates all facets of the program. Ideally, the program development specialist should be familiar with the NCERD Teacher Education Program Models, know their commonalities, and be aware of the feasibility of implementing various aspects of them. Also, he should be familiar with urban education in all of its ramifications--especially programs designed for the educationally disadvantaged. A prerequisite for the program development specialist is that he be a research and evaluation person. These qualities are critical; other qualities are secondary to those.

JS: I agree with most of what has been described as appropriate program development specialist roles and that those roles will vary from program to program. In our case, the program development specialist has been chiefly concerned with working with a wide-range of faculty in developing a competency-based curriculum. That involves the specification of competencies and objectives, the design and construction of modules and instructional activities and materials, and the development of appropriate student evaluation procedures. Of course, our program development specialist was also a "jack-of-all-trades," but competency-based instruction was the major focus of his work.

WK: The program development specialist role at our institution was played by three persons: the Director of Educational Research and two graduate research assistants. There were three major tasks accomplished: data collection for this project, providing technical assistance and receiving resources for those of the faculty who were developing competency-based programs, and providing a monitoring and feedback system for the Teacher Corps staff.

SF: The program development specialist must be an "expert" in the design of instructional modules himself. He must be a facilitator of staff efforts to design and implement modules. He must be knowledgeable about the sociological factors involved in making a competency-based program work well; that is, he must understand community, university, school district, and student variables--and their interaction. He must be capable of asserting these diverse forces to be aware of the demands each places on the others.

TS: The program development specialist has the responsibility of facilitating the development and implementation of innovative teaching methodologies in the Teacher Corps program. As a facilitator he should be competent in interpersonal relationships and resourceful in providing technical assistance needed by members of the team. Since innovative programs require continuous evaluation of the extent to which program objectives are realized, the program development specialist must be competent in evaluation techniques and systems management procedures.

IN: The role of the program development specialist seems to vary a

bit from program to program but in any event that role seems to be an important one. Indeed, one begins to expect to find that a good program development specialist must be able to leap tall buildings at a single bound, be faster than a speeding bullet, and be more powerful than a steaming locomotive. I suspect the lesson to be learned here is that variations on the theme are--and should be--the case. It is obvious that the program development specialist is expected to play many roles but is the person mainly responsible for developing the competency-based aspects of the program and thus it seems reasonable to expect him to be a staunch advocate. But what of others in the program? Interns? Faculty? Public school people? How do they feel?

- TS: Our interns are cautiously optimistic, they are supportive but have found it more difficult than they had expected.¹¹ Teacher Corps faculty and our other faculty are excited by the notion and want to be involved to a greater extent. The administration has been very supportive. Reaction from public school people has been mixed; this is likely due to a lack of in-depth understanding on their part. They have been faced with so many other problems this year--including integration--that they just haven't been able to get on top of this.
- OU: Interns and team leaders are very positive about the concept. Their reactions have been very favorable all along. An overwhelming majority of the Teacher Corps staff is supportive and is involved in module development. Within the total faculty at the university, a majority is supportive, but a few are not. The dean is most enthusiastic. The public school people are supportive of what we're doing jointly.
- JS: Our interns are most positive. The Teacher Corps staff has become sold on competency-based instruction as it has worked on it. Other faculty are receptive but really aren't sufficiently informed as yet; the School of Education and Technical Studies has taken a very positive stand. Our administration is receptive but is unable to be as supportive as we'd like because of limited fiscal resources. The reactions of public school people have been mixed; they need to know more about it.
- SF: Mixed is the word for our situation. I'd say just a bit more than half of our interns are positive with the remainder being neutral or negative. Many had difficulty initially with the behavioral aspects of the competency approach. A further look is needed as to how best to get them initially involved. The Teacher Corps staff is generally favorable. The faculty in general is at present tolerant but open to further evidence as to the effectiveness of a competency emphasis. Many are still rather uninformed. The public school people haven't been able to get on top of this because of other problems. The administration is unable to be very supportive due to limited financial resources and a lack of adequate facilities.
- WW: We've had a similar reaction with interns. For the most part, they are "do-your-own-thing" oriented, not objectives oriented.

Their attitudes are improving, however, and they have actually come a long way. Teacher Corps faculty are generally positive with a few being very excited by the idea; here, too, things are improving. Other faculty range from "blah" to enthusiastic; as we have used them as resource people and as they have conducted mini-courses for us, things have improved. Our administration is generally knowledgeable and supportive. And it is worth noting that as our local committees pick up steam support in the field is growing. Many are beginning to realize the power such an approach has.

- WK: Our interns are also very positive in their perceptions. Our Teacher Corps staff have reached a point where their attitude might be described as one of missionary zeal. Some other members of our faculty are growing more positive as they become involved. The public school people have been cooperative but they haven't been involved in this phase of the program.
- BS: Generally our interns are positive about the competency-based approach although many were disappointed that more of their program wasn't competency-based. Many were angry at professors they thought were shortchanging them. Reactions of the faculty have been mixed but are becoming more and more positive. And we feel that both our administration and the public school people are supportive.
- IN: Positive reactions seem to be the general case. Some of the statements made earlier lead me to believe that this is so even though you have faced a great many problems. A number of these were described earlier. Are there others our readers ought to know about?
- OU: I'm sure this is beginning to sound like a bunch of "war stories" but perhaps recognition of some of these problems can save someone some grief. I think it is important to recognize that there are rather severe limits as to what one can do with quarter-time and half-time faculty. This is particularly true with regard to the program development specialist. And I'd like to suggest that the goals of Teacher Corps mandate fiscal support for research and development efforts. It is most difficult to do the kinds of things expected within the budgetary constraints imposed by a training grant.
- WW: That's a valid point. Teacher Corps programs are largely research and development efforts and should be funded accordingly. Actually we could probably list a couple of dozen additional problems since there have been so many. However, let me just hit some of the high spots. We had a rather serious problem because of the geographical spread of our schools. We sometimes had the feeling that they were spread out over most of the Northwest. You can imagine the communications problems involved and you can also understand why the local committees evolved. Related to this was the fact that even a handful of interns have a large impact on a small district. They are highly visible--their presence is felt. That, of course, is compounded by the fact

that most of them think it is their task to "change the schools." Most are ill-prepared to play change agent roles and they succeed only in rocking the boat rather unproductively. That ties to the political realities involved in parity decision-making. And finally there is the issue talked about earlier--there is little agreement regarding program priorities.

SF: We were hampered by a lack of clear role definitions. We lost both our director and associate director in midstream and that made this pretty tough. Organizational structure was poor. Only now are these things beginning to get squared away. An additional problem was one mentioned earlier but worthy of repeating. We found by and large that our interns were not the "breed of cat" who was turned on by a behavioral emphasis--they were more "intuitive" in their decision-making objectives. That is becoming less of a problem but it still rears its ugly head now and again. More time in the schools may change this. Also we found that we often did not have the most creative, flexible cooperating teachers working in low-income schools.

WK: Perhaps another problem worth mentioning is one we faced which continues to cause us trouble. We have found that some schools simply do not welcome as much community involvement as interns see as appropriate. This really concerns some interns and causes their relationships in the schools to be strained. As mentioned by the San Francisco representative, it's worth keeping in mind the fact that very often your best teachers--and best potential team leaders--are not found working in low-income, minority schools. That makes team leader recruitment more difficult. Finally, you have the problems which result from a situation in which your team leaders and other school people do not see themselves as teacher educators. A great deal of effort is expended building that perception into their role attitude set.

BS: The biggest initial problem was the lack of understanding by some faculty who seemed to have a mind set against anything that makes teaching anything other than an art. There was--and still is on the part of some--a resistance to making objectives public because this has the effect of making faculty accountable. This is a problem we are slowly overcoming but it still hits us from time to time. And like everyone else we, too, found ourselves short of time and money for development purposes.

JS: I think most of ours have been mentioned, but it is perhaps of value to emphasize that those who would move in this direction should--early in the game--identify those institutional constraints which operate counter to the notion of competency-based instruction. Fight those battles early. And to repeat another point made earlier, give great attention to staff development. Get staff tooled up early. Like the Western Washington program, we were also handicapped by sites which were so distant from campus. This put a lot of pressure on developing on-site inservice programs. One which we emphasized was on module development. Like Western Kentucky we had problems in certain schools because interns

organized the community. In fact, one team was thrown out because of this. We dealt with some situations where people were reluctant to change; they seemed to be quite self-satisfied. That didn't sit well with change-minded interns. The other side of the coin is that some interns failed to familiarize themselves with the situation before jumping in and pushing for change. Consequently, they fought some fights they couldn't win.

IN: Once again I get the feeling that I'm talking to a bunch of battle-hardened veterans who have been through the wars. Your comments may frighten off some people who were contemplating similar efforts. Surely you must have found that there were resources which were helpful as you worked on your program. What were some of these?

JS: There were a number of things. We used "Competency-Based Teacher Education: An Overview," the slide-tape materials, and found it to be a very effective orientation device. We also found the VIMCET filmstrips to be effective training materials; they are widely used by the educational psychology people. The handbook developed by Arends, Masla, and Weber, "Handbook for the Development of Instructional Modules in a Competency-Based Teacher Education," was a helpful guide. Jim Eisle from the Technical Assistance Project at the University of Georgia was helpful as was the National Coordinator. We also found a number of conferences--the National Conference, the TAP Conferences, and so forth--to be most helpful.¹²

WK: We also used and benefited from the slide-tapes materials and the handbook. Jack Kean from Wisconsin, our Technical Assistance Project consultant, was most helpful. The "learning module on learning modules" produced at the University of Houston appears to be an especially valuable set of resource materials.

SF: I'd agree with most of the above but with some reservations. The handbook and slide-tape presentations are helpful as far as they go--which isn't far enough. They are good introductory devices but the big question is "then what?" Where does one go from there? The latter question is one which neither those materials nor the Teacher Corps Washington guidelines answer. The big problem, I would say, is to insure that what goes into competency-based components is significant. Otherwise it is likely to be the same old irrelevant "stuff," only wrapped in differently colored paper.

WW: There are three resources which have made major contributions to our program. The first is the Comfield Model. This document has provided, not so much a technical resource as a philosophical one. The big ideas in the document are: first, competency-based teacher education with pupil behavior as the criteria for teaching competency; secondly, individualization--including personal decision-making; and thirdly, field-centered experience. These ideas have been used by the staff as broad goals in its work with interns, teachers, and local committees. The second resource

has been the staff. At the college we have involved about two dozen regular staff to provide mini-courses and seminars for particular interns at appropriate times. The five regular courses at the College have also been modified to meet the particular needs of the interns. The staff has become increasingly flexible in its response to Teacher Corps needs. We have also used about a dozen teachers and administrators in the field to conduct mini-courses for the interns and other staff. The third resource has been the program specialists from Teacher Corps Washington. These people have been invaluable to us in providing both practical ideas and a perspective of Teacher Corps efforts across the country.

- OU: Our staff benefited from the module development handbook and the competency-based teacher education slide-tape materials produced at Syracuse University. Other valuable assistance was given at the regional meetings which emphasized the development of competency-based instructional modules.
- TS: We too found the "Competency-Based Teacher Education: An Overview" slide-tapes materials and the Arends, Masla, and Weber handbook to be quite useful. We profited from having one of our staff on a joint appointment basis with TTT and from another, Sumpter Brooks, involved with the TAP efforts. Chuck Johnson from the University of Georgia and Walt LeBaron, a systems management consultant out of Washington, both did nice jobs for us. We also used materials from the Northwest Regional Laboratory and from Weber State.
- BS: We found a number of resources which were helpful: the Far West Lab's mini-courses, the handbook, the Phase I Model Elementary Teacher Education Project reports, the slide-tape on competency-based teacher education, the University of Houston materials on modules, a number of books including the four volumes on objectives by Westinghouse Learning and books by Mager, Weigand, and Kibler. We also found the National Coordinator and the Model Directors to be helpful as was Hans Anderson from Indiana University. There are lots of resources which can be helpful if you go out and get them.
- IN: We certainly have talked to a number of important issues. Perhaps, Dr. Weber, you would take these last few minutes to share with us any conclusions and recommendations you might have.
- NC: From my view there are a number of previously made points I'd like to emphasize; in addition, there are some conclusions and recommendations I'd like to suggest in light of the experiences of this past year. First of all, I too think it is important to look at the progress each project has made in terms of both the large number of program objectives each was attempting to achieve and the many constraints each faced. No project has been able to fully meet all of its objectives, but each has made hard-earned progress toward the achievement of those objectives. One also needs to consider that the processes and outcomes we've

been discussing here today have been concerned with only the first year of a two-year project and that much of the earlier stage--as you'd expect--was characterized by some wheel-spinning. It is unfortunate that NCERD was unable to fund the projects for the second year because only then will certain kinds of progress be evident. However, it is the intent of this group to continue our efforts by meeting together and discussing our common problems, by sharing materials and other resources where possible, by continuing the data collection and evaluation processes, and by preparing a final report which describes the second year of the projects.

- IN: Apparently you all feel strongly about what you've been doing and will find ways to continue these efforts.
- NC: Yes, we do. We feel it is especially important to communicate with one another and to communicate with others who are also in the process of developing competency-based programs.
- IN: Communication of the types described seems to be an important factor. Could you elaborate on that, please?
- NC: Well, it seems to me that the present structure provides too little opportunity for communication between programs. The National Conference helps and so do the regional conferences, but that simply isn't enough. In addition, personnel from the Technical Assistance Projects and the program specialists from Teacher Corps Washington are generally helpful but their consultations don't provide for direct contact with the people who are out there in field facing the problems we face every day. We need to find ways to send people from one project to another; to allow them to see other projects first hand. That's perhaps the best way to get a feel for what others are doing and to see the implications of their work for your project. And we need to find better ways of sharing resources--and ideas--across all projects.
- IN: What other kinds of conclusions can you make from your study?
- NC: As I examined each of the seven programs I found both similarities and differences. I am struck with the variations on the theme which have developed with regard to the notion of competency-based teacher education and with regard to the role of the program development specialist. Personnel from each program have taken the concept of competency-based instruction and have operationalized that concept in their own unique way. For example, Western Washington has what it calls an "emerging program." They have opted for long-term development which capitalizes on inputs from the field in the specification of teacher competencies. Buffalo, on the other hand, has been using faculty expertise to develop a large number of module clusters on the assumption that certain competencies have already been identified. Eventually, Western Washington faculty will no doubt begin to build instructional activities around those competencies which are generated by the process approach they have been using

and Buffalo will probably put greater emphasis on inputs from off-campus sources, but initially their efforts have been quite dissimilar in this regard. Earlier comments also point out differences regarding module format and program development specialist roles. I think these variations on the theme are healthy for they take project environments into consideration. Also, I suspect that the variance I found was a bit surprising since all were following Teacher Corps guidelines which I have perceived as confining.

IN: Confining? In what way?

NC: The guidelines specify not only many required project outcomes but also specify many of the structures and processes which must be used in achieving those outcomes--competency-based instruction, team teaching, university-school-community parity, systems management, for example. Certainly many of the similarities are mandated by the guidelines. But in spite of those guidelines, variance between programs appears to be rather great. I still believe Teacher Corps Washington ought to be less concerned with prescribing processes and be more concerned about presenting alternatives while at the same time holding programs accountable for reasonable outcomes.

IN: Are there other conclusions you have drawn?

NC: The additional points I'd like to make in the time we have left are more like recommendations than they are conclusions, for it seems to me that some of the lessons we've learned should be passed on to others involved in program development of the type with which we've been concerned. It must be realized that the identification of the teaching competencies interns are to demonstrate is a most difficult task which must take place within a conceptualization of the teacher's role. Closely related to this are the joint problems of establishing the criteria which will be used as evidence of the intern's level of achievement relevant to the competencies specified and of collecting that evidence through appropriate measurement procedures. One needs to recognize that the "state-of-the-art" in this sort of evaluation is less than fully adequate and should not be allowed to limit the competencies specified to those easily measured, for these are generally at best prerequisites for more important competencies.

IN: Measurement problems will no doubt continue to plague most forms of educational enterprise for some time to come. It would seem important not to allow those limitations to severely influence projected program graduate outcomes. Are there other recommendations you would like to make?

NC: Yes. I think it is important for program personnel to recognize that they are going to be faced with having to simultaneously develop and implement their program. Generally, programs are notified of funding in April or May. Since most preservice

programs start in July, this procedure provides very little lead time. And so, program personnel are immediately faced with much to do and little time in which to do it--recruiting and training administrative and instructional staff, solidifying commitments between the university, school district, and community, selecting interns, preparing instructional materials, and on and on and on. The funding pattern really doesn't recognize certain of the realities of academic life. They also need to recognize that this is compounded by attempts to do the innovative, a difficult enough task even when not pressed by time and the presence of interns expecting to be trained--through a polished, ready-to-go, instructional program. It might be worthy to note here that our biases suggest that during this initial period and throughout the length of the project, the program development specialist should be full time with the program and that the present policies which prevent the paying of on-campus consultants on an overload basis should be changed. One must get key faculty "on board" quickly and that time presently would be during the spring when they are already on full load as a part of their regular appointment. Another associated problem has to do with the various budgets a program has: preservice, inservice, first year, second year, intervening summer, university, school district--or, perish the thought, school districts. This is a very difficult thing to deal with at times. I have, I'm afraid, painted a somewhat gloomy picture. I don't mean to do that at all. It is simply that people ought to know what they're getting into and should be prepared to deal with those problems. But let me close on a brighter note: I believe that each of the programs has made significant progress in developing competency-based programs and that the appropriateness and effectiveness of what they have done is best reflected in the perceptions of interns about the worth of competency-based instruction in their program and in their own teaching of children--an awfully difficult group of people to please. I think each program--given adequate support--will make even greater gains in the year to come. And I wish them all the best success.

IN: I think we have just about used our allotted time. Dr. Weber, are there any closing comments you would like to make.

NC: I'd just like to thank each of those involved for being both cooperative during this interview and throughout the project. I would hope that we could build on the work of these people--teacher educators who took those first, most difficult steps.

IN: My thanks to all of you for your assistance. I do hope others will find this interview to be both interesting and helpful for that was our intent.

Final Report

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THE COMPETENCY-BASED TEACHER EDUCATION DEVELOPMENT PROJECTS

Volume II of Two Volumes

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PREFACE

Final reports are notoriously dull. As a consequence, most are not widely read. This document represents an attempt to make a final report more interesting and, therefore, more widely read. In an effort to accomplish those two goals, this report strays from the usual format.

The first volume presents a fictitious interview which invites the reader to examine the thoughts of representatives from seven fifth cycle Teacher Corps projects as they describe their efforts to develop competency-based teacher education programs--a most difficult task. Thus, the first volume focuses on a variety of issues related to program development efforts. The description of the progress made and the problems faced is realistic; only the interview scenario is fictitious.

The second volume consists of twelve sections each of which provides information which is offered in support of statements made in the first volume. While much of the information provided here might be categorized as "soft data," it was decided that those who would examine the process of competency-based teacher education program development might profit from such information even though it might be tentative in nature. The hope of the author is that the reader will find the information--and the report--helpful.

Wilford A. Weber
Project Director

Syracuse, New York
December, 1971

CONTENTS

VOLUME I

PREFACE	ii
ACKNOWLEDGMENTS	iii
ABSTRACT	iv
CONTENTS	v
THE INTERVIEW	1

VOLUME II

PREFACE	ii
CONTENTS	iii
LIST OF TABLES	vi
SECTION I: OBJECTIVES OF THE PROJECTS	1
Syracuse University	1
Jackson State College	2
Oakland University	2
San Francisco State College	3
State University College at Buffalo	3
Texas Southern University	4
Western Kentucky University	4
Western Washington State College	5
SECTION II: TEACHER CORPS AND COMPETENCY-BASED TEACHER EDUCATION	6
Teacher Corps Guidelines and Competency-Based Teacher Education	6
Newspaper Article	8

Memorandum from National Director	10
SECTION III: A DEFINITION OF COMPETENCY-BASED TEACHER EDUCATION	14
SECTION IV: THE EMERGING NATURE OF THE WESTERN WASHINGTON STATE COLLEGE PROGRAM	18
Introduction	18
Strengths of the Emerging Program Concept	19
Weaknesses of the Emerging Program Concept	19
Summary	21
SECTION V: PROGRAM PRIORITIES AS VIEWED IN THE WESTERN WASHINGTON STATE COLLEGE PROGRAM	22
Introduction	22
Procedures	23
Results	27
Discussion	32
SECTION VI: EXAMPLES OF INSTRUCTIONAL MODULES	36
Teacher Corps Guidelines and Instructional Modules	36
Jackson State College	37
Oakland University	46
San Francisco State College	58
State University College at Buffalo	65
Texas Southern University	72
Western Kentucky University	82
Western Washington State College	88
SECTION VII: STAFF DEVELOPMENT CONFERENCES AT THE STATE UNIVERSITY COLLEGE AT BUFFALO	98
SECTION VIII: IN-SERVICE PROFESSIONAL CONFERENCES AT TEXAS SOUTHERN UNIVERSITY	117
SECTION IX: SAMPLE MODULES FROM THE DEPARTMENT OF DESIGN AND INDUSTRY AT SAN FRANCISCO STATE COLLEGE	147
SECTION X: DESCRIPTIONS OF THE ROLE OF THE PROGRAM DEVELOPMENT SPECIALIST	156
Jackson State College	156
State University College at Buffalo	157

Western Kentucky University	160
Western Washington State College	161
SECTION XI: INTERN PERCEPTIONS REGARDING COMPETENCY-BASED TEACHER EDUCATION	
Intern Comments	164
Intern Ratings Regarding Competency-Based Teacher Education .	216
Intern Attitudes Toward Teaching	225
Intern Attitudes Toward Low-Income, Minority Persons	228
Intern Perceptions at Western Kentucky University	230
Student Perceptions at Jackson State College	231
SECTION XII: SUGGESTED RESOURCES	
Books	234
Mediated Materials	235
Persons	236
Model Elementary Teacher Education Project Phase I Final Reports	237

LIST OF TABLES

TABLE	PAGE
1. Mean Scores Obtained from Jackson State College Intern Ratings Regarding Competency-Based Teacher Education . . .	218
2. Mean Scores Obtained from Oakland University Intern Ratings Regarding Competency-Based Teacher Education . . .	219
3. Mean Scores Obtained from San Francisco State College Intern Ratings Regarding Competency-Based Teacher Education	220
4. Mean Scores Obtained from State University College at Buffalo Intern Ratings Regarding Competency-Based Teacher Education	221
5. Mean Scores Obtained from Texas Southern University Intern Ratings Regarding Competency-Based Teacher Education	222
6. Mean Scores Obtained from Western Kentucky University Intern Ratings Regarding Competency-Based Teacher Education	223
7. Mean Scores Obtained from Western Washington State College Intern Ratings Regarding Competency-Based Teacher Education	224
8. Mean Scores Obtained from Intern Responses to the Teaching Situation Reaction Test	227
9. Mean Scores Obtained from Intern Responses to the Cultural Attitude Inventory	229

SECTION I: OBJECTIVES OF THE PROJECTS

The following are statements describing the objectives of the Competency-Based Teacher Education Development Projects. First, the objectives of the national coordination project housed at Syracuse University are described. This is followed by descriptions of the objectives of each of the seven fifth-cycle Teacher Corps programs involved. In all cases, the objectives stated here have been drawn from the proposals which were developed relevant to this particular effort.

Syracuse University

The purpose of this project is to facilitate, coordinate, describe, and evaluate the activities of seven fifth-cycle Teacher Corps programs as they develop and implement--to the extent possible--competency-based teacher education programs which utilize the ten National Center for Educational Research and Development teacher education models as a resource. More specifically, project personnel would:

1. Increase the awareness of each of the programs with regard to the resources available relevant to competency-based teacher education; particular emphasis would be placed on the NCERD models and feasibility studies and on the utilization of model personnel.
2. Consult with each of the programs in order to facilitate the development, implementation, and operation processes.
3. Coordinate the efforts of the seven programs so as to maximize the utilization of resources.
4. Perform the major role with regard to evaluation including instrumentation, data collection, and analyses; particular emphasis would be given to a thorough description of process dimensions.
5. Facilitate the activities of the program development specialist designated by each of the seven programs; the program development specialist would serve as liaison to this project, would have "in-house" data collection and process description responsibilities, and would assist the project director in the accomplishment of the goals of this project relevant to his program.

The activities of this project would be intended to facilitate the goals of the seven NCERD-Teacher Corps programs by providing for communication between programs, by coordinating resource utilization so as to maximize productivity, by relieving programs of most evaluation responsibilities so that maximum resources might be directed toward instructional aspects, and by providing resources which otherwise might not be available.

Jackson State College

The objectives of the Competency-Based Teacher Education Development Project at Jackson State College are:

1. To change from a traditional teacher preparation program into a competency-based program employing instructional modules.
2. To form task forces of faculty members, teachers, community workers, and students to identify the desired competencies for a Master of Science in Early Childhood Education.
3. To review the three hundred and fifty specifications identified by the University of Toledo Education Model as minimum components of an early childhood competency-based model, in relation to the established course of study of fifteen courses in this area at Jackson State College.
4. To identify, modify, or create specifications that include behavioral objectives, detailed statements of suggested treatment and alternative routes, instructional materials, and evaluation strategies.
5. To procure or develop resources needed to employ these specifications; to sequence the specifications; to determine the efficacy of the treatments and sequence.

Oakland University

The objectives of the Competency-Based Teacher Education Development Project at Oakland University are:

1. To bring about role changes for faculty through redesigning the teacher education program in concert with school personnel and community representatives, and by moving from a traditional course-locked system to a flexible laboratory-oriented system.
2. To change from course structure to instructional modules, through the redesigning of university support systems into over-all components.

3. To develop a competency-based curriculum with stated objectives and performance criteria.
4. To provide for greater inter-disciplinary involvement in teacher education programs.
5. To develop a continuous evaluation of intern and program progress through systems analysis.

San Francisco State College

The objectives of the Competency-Based Teacher Education Development Project at San Francisco State College are:

1. To clarify and elaborate the established objectives of the San Francisco State College-San Francisco Unified District Cycle 5 (1970-72) Teacher Corps proposal and amendments with emphasis on behavioral statements.
2. To collaborate with NCERD/T National Coordinator in the planning of evaluation design, instrument selection, pre- and post-testing, and other data collection and analysis related to established objectives.
3. To review, select, implement and evaluate the effectiveness of available competency-based teacher education program components supportive of established objectives.
4. To develop, implement, and evaluate the effectiveness of new competency-based program components supportive of Cycle 5 objectives with the participation of project staff, team leaders, and interns.
5. To develop and utilize program and intern feedback and evaluation systems.

State University College at Buffalo

The objectives of the Competency-Based Teacher Education Development Project at the State University College at Buffalo are:

1. To develop a competency-based, rather than a time-based, program for the training of prospective elementary school teachers.
2. To construct a program tailored to the individual characteristics, competencies, and needs of the interns.
3. To prepare interns to relate successfully with low-income students, both in the school and in the community.

4. To develop staff-team leader competencies for the skillful directing of interns.
5. To evaluate the developmental and implemental processes.

Texas Southern University

The objectives of the Competency-Based Teacher Education Development Project at Texas Southern University are:

1. To describe the processes involved in developing and implementing a competency-based program.
2. To describe the procedures and processes involved in securing productive participation of teacher educators and local school personnel in planning and experimenting with new teaching methodologies and staffing patterns which may emerge from the competency-based program.
3. To describe and evaluate the transitional processes associated with the change from traditional course structures to the use of instructional modules.
4. To develop a descriptive profile of Teacher Corps interns and document changes in their attitudes and understandings, and in their development of teaching competencies as they progress through the program.
5. To conduct an evaluation of the accomplishments of the project in generating a model competency-based program and derive recommendations for future planning.

Western Kentucky University

The objectives of the Competency-based Teacher Education Development Project at Western Kentucky University are:

1. To prepare interns to relate successfully to children and parents from low-income areas.
2. To provide each intern with some competency in specified basic teaching skills.
3. To provide an opportunity for the University to experiment with a concentrated workshop approach to the pre-service training of teachers in four basic areas: Introduction to Education, Psychology of How Children Learn and Develop, Teaching of Reading, and the Sociological Concern of Teaching.

4. To provide an opportunity for school and university faculties to cooperate in providing learning experiences for underprivileged children.
5. To provide an opportunity for the school to use interns in making vital contacts with the community in order to improve the social conditions of the youth.

Western Washington State College

The objectives of the Competency-Based Teacher Education Development Project at Western Washington State College are:

1. To field-test the separate training components of the ComField model in order to create a more complete, generalizable field-testing model.
2. To indicate how often field-testing procedures preceded program revisions, and to describe the nature of these revisions.
3. To provide a more formal description of the field-testing procedures as a model for formative evaluation of competency-based training components.
4. To indicate whether the field-testing plan yields information regarding: (a) the adaptability of ComField components for specific Teacher Corps purposes, (b) cost-benefit data about each of the components, and (3) the instruments that can readily be used in field-testing.
5. To estimate how well future use of the field-testing procedures will provide validating information about individualized, competency-based training programs.

SECTION II: TEACHER CORPS AND COMPETENCY-BASED TEACHER EDUCATION

The materials which follow attest to the commitment Teacher Corps has expressed relevant to the development of competency-based teacher education programs. These materials are of three kinds: (1) excerpts from the most recent edition of the Teacher Corps Guidelines, (2) a copy of a newspaper article entitled "Teacher Corps Focuses on New 'Competency' Approach," and (3) a copy of a memorandum sent to all program directors and project coordinators by Richard A. Graham, National Director of Teacher Corps.

Teacher Corps Guidelines and Competency-Based Teacher Education

The October 1970 draft of the Teacher Corps Guidelines provides clear evidence of Teacher Corps commitment to the development of competency-based teacher education programs. Excerpts from the two sections of that draft which most directly describe that commitment are presented here. The first is from the section on page 3, Broadening Programs of Teacher Preparation; the second is from page 24, the section on Competency-Based Teacher Education and Certification.

Excerpt from pages 3 and 4. Teacher Corps projects should offer colleges and universities an opportunity to investigate and adopt new approaches in teacher preparation. Colleges and universities must clearly intend to adopt into their regular teacher education programs those elements which prove successful in their Teacher Corps projects. Hence, the proposals must specify the new approaches which will be undertaken in the Teacher Corps project, the timetable for general adoption should these new approaches be favorably evaluated and a clear statement by whom and by what criteria the decision to adopt will be made. Such new approaches should include:

1. Developing teacher education programs which are dependent upon the ability to exhibit desired teacher competencies and developing a system of learning which permits student self-pacing, alternate learning routes and greater student initiative in learning. Such programs should be characterized by:
 - a. Partnership with school districts and communities;
 - b. Specification of desired teacher competencies and reformulation of learning activities to assist students to develop and demonstrate these competencies;
 - c. Use of internship as an extended period of training and service in schools and communities;

- d. Systematic planning for program development and for program management;
 - e. Development of a series of modules to allow for student self-pacing and more individualization of learning strategies;
 - f. Use of systematic feedback and evaluation techniques to provide continuous program modification; and
 - g. More personalized learning and increased student responsibility for his own learning.
2. Moving toward university-approved programs of teacher certification and pilot programs for States which wish to develop new certification standards. The programs should be moving toward increased use of criteria based upon teacher performance or behavior and the products of teacher behavior; e.g., children's learning.
 3. Establishing internships not only as a training period in regular teacher preparation, but also as a period when interns, functioning as members of a school staff, provide service to children.
 4. Establishing "portal schools," or comparable teacher education centers based in public schools but cooperatively supported by schools, universities, teacher associations, and other education agencies for the training and retraining of school personnel.
 5. Involving other colleges within the university in reshaping teacher preparation along interdisciplinary lines.
 6. Developing a system for continuous feedback and program evaluation from Corpsmembers to both school and university staff to ensure that the internship remain a valid and relevant learning experience.
 7. Offering university credit to interns and other personnel for their training and work in the school communities.
 8. Using university instructors to teach and provide resources and support to Corpsmembers and regular school staff at school and community sites.
 9. Using regular school staff and community members as resource persons and adjunct teacher trainers in university instruction.

Excerpts from page 24. Competency-based programs of teacher preparation are being developed by leading institutions of teacher education. Several states have declared their intent to develop new standards of teacher

certification based upon performance standards. The U. S. Office of Education has funded ten universities over the past three years to do developmental and feasibility studies of competency-based teacher education. Teacher Corps is committed to the support of local projects which seek to test and adopt the ideas developed in these models or other approaches comparable in scope.

Teacher Corps funding will be provided to those institutions which seek to specify performance competencies as equivalents to the completion of a university-approved program of teacher certification or to institutions which seek to develop programs comparable in scope.

Support will be provided to colleges of education which seek to work in collaboration with public schools, communities, teacher associations, other centers for educational innovation, and colleges of liberal arts and science.

Such programs should allow the student to share in the responsibility for his own learning by making explicit the competencies for which he is accountable and the criteria by which these competencies will be assessed.

Such programs are designed to assist students to learn at their own pace and participate in selecting the strategies for their learning. Modular units of learning are a feature of these programs.

The goal is to provide more flexible, personalized patterns of teacher preparation through an internship which fosters the maximum personal and professional development of persons who wish to teach.

Interim steps to individualized training will probably be necessary. Several approaches and program designs are possible. After approval of the proposal, Teacher Corps funds may be expended for consultants who can assist in program development.

Newspaper Article

The newspaper article which follows appeared on page 22 of the Syracuse Herald-American on August 23, 1970. It provides a rather clear indication of Teacher Corps commitment to the notions of competency-based teacher education.

Teacher Corps Focuses on New 'Competency' Approach

By JOE LaGUARDIA

The Teacher Corps will commit all of its funding over the next five years to universities attempting new methods and approaches to teacher education.

Richard A. Graham, director of the Teacher Corps, says this commitment, in the first year, will involve approximately \$30 million and at current levels of funding, could total more than \$150 million by 1976.

The Teacher Corps was established in 1965 by Congress to improve the educational opportunities for poor children and to encourage colleges and universities to improve their programs of teacher preparation.

Based on Competency

The new approach is "competency-based education." According to a recent Teacher Corps memo, under this new approach teachers will only be certified if they have "acquired and demonstrated competency in a wide spectrum of teaching methods and skills which are known to reach children." Passing required courses would no longer be the only prerequisite for gaining certification.

Graham charges the tradi-

tional way in which most universities prepare teachers "is not meeting today's educational needs, particularly those of poor children."

Graham feels emphasis in traditional teaching methods has been heavy on theory and light on application, thus giving the teacher little or no experience with children when he or she takes over a class.

The director feels that competency-based education can fill the gaps traditional teaching methods have caused.

Large-Scale Effort

Teacher Corps grants will be used to support only those colleges, universities and school districts which seek to develop programs which are based on the principles of the Models of Elementary Teacher Education developed in the last two years by leading universities under special grants. One of the models was developed at Syracuse University.

Competency-based education is the first large scale planning effort in teacher education, according to Dr. James Steffensen, acting chief of organization and administration studies of the National Center for Educational Research and Development (NCERD).

Steffensen says departments

within universities, especially mathematicians and historians, are becoming involved in the proposed teaching changes.

He expects the new teacher preparation to be operative within five years across the country with two additional years needed for evaluation studies.

The new method, Steffensen believes, will allow greater individualized instruction.

Essential Elements

Graham said two of the essential elements of competency-based education are that students should learn at their own pace and that they should determine how they should proceed.

The success or failure of the new teaching approach depends on whether it produces competent graduates who actually enter the profession, and whether they perform effectively, a director who is guiding the program concludes.

Dr. Karl Massanari, associate director of the American Association of Colleges for Teacher Education, said because of this "pressure is being brought upon the colleges and universities to guard the quality of graduates turned out."

Responsibilities

The new teaching system, in addition to the standard lecture and recitation periods, is expected to give the student a means of continuous development, with learning a gradual or rapid process, depending on the individual.

One of the new trends is to have the student use his time differently, not spending the majority of his time in the classroom.

A report by Dr. Wilford Weber, assistant professor of education at Syracuse University, says that "programs call for early awareness experiences, tutoring, microteaching, small group responsibilities, and total class responsibilities throughout the professional education of the student."

No set teaching system for competency-based education has been established, his report concludes, because each university "will have and must have variations on the theme."

Teacher Corps programs are now operating in 87 universities, two state school systems and over 140 school districts and facilities in 35 states, Puerto Rico and the District of Columbia.

Memorandum from National Director

The following is a verbatim copy of a memorandum which was sent by Richard A. Graham, the National Director of Teacher Corps, to all Teacher Corps program directors and project coordinators on December 7, 1970. This memorandum clarifies Teacher Corps policy regarding the Elementary Teacher Education Program Models, competency-based teacher education, and the purposes of Teacher Corps.

You may have noticed the recent news stories in connection with Teacher Corps support of the 'models' and wonder what it now means for your project.

The stories are essentially correct. The Teacher Corps will provide support to school systems and universities which join with their communities and state departments to develop plans to test out the ideas embraced by these 'models'. We refer to 'models' though they are not, strictly speaking, models of elementary teacher education nor are many of the ideas limited to teacher education, elementary or otherwise.

The news articles do not herald a recent change in purpose for the Teacher Corps but rather should be seen as a report on a course of action first proposed about two years ago and presented in some detail at the National Conference held here in Washington in the fall of 1969. Previously, we had discussed this definition of Teacher Corps purpose with many of the leading educational associations and it had received their general approval. We met with representatives of the American Association of Colleges for Teacher Education, the National Commission on Teacher Education and Professional Standards, the Council of State School Officers, the American Association of State Colleges and Universities, the American Council on Education, the National Education Association, the American Federation of Teachers, the American Association of School Administrators, the Association of Classroom Teachers, the Research Council of the Great City Schools, the Association of Big-City School Boards and several others.

This course of action appears to be consistent with the purposes of the Teacher Corps as set forth in its legislation. The two purposes are 'to encourage colleges and universities to broaden their programs of teacher preparation' and 'to improve educational opportunities to children in areas having concentrations of low-income families'. The first purpose, the broadening of teacher education, clearly suggests change, and nothing could be more consistent with the 'models' program.

But 'educational opportunities' could be improved in a variety of ways: by providing additional services to schools which need them, by better preparing teachers for service in these

schools, by helping to introduce improved curricula or by helping to introduce the processes of educational renewal. It appears that the last approach--the introduction of process--would provide the greatest return on the investment.

Teacher Corps legislation also calls for inexperienced interns who serve in teams under the leadership of experienced teachers. Further, the legislation authorizes the Teacher Corps to enter into arrangements with school systems and universities for the accomplishment of the above purposes wherein Teacher Corps can pay for the costs of entering into such arrangements and the costs of necessary technical assistance. Since the 'models' include all of the above features, they appear to offer a design for accomplishing these purposes, a design which provides cohesiveness, comprehensiveness, and very likely, a synergistic effect.

Over a year ago we entered into negotiations with the people in the Office of Education who had been responsible for the development of the 'models'. We worked out a cooperative program for their further refinement and for initiation of teacher education programs based upon the models idea. Late in 1968 we began the drafting of guidelines based upon the models idea. Teacher Corps guidelines have been in a state of redrafting ever since and still remain a mixed statement of ends and means. We seek your help in preparing guidelines which will be of greater help to you and will, to a far greater degree, be a statement of our common goals, leaving to the greatest extent practicable, the means for the achievement of these objectives to local preferences.

What are the common features of the 'models'? They are stated concisely in the pages taken from Cruickshank's commentary on the models. Fannie Shaftel's critical analysis of the models is also essential reading. In general, the 'models' see the teacher as the clinician, a member of a team. The 'models' call for teacher certification based upon demonstrated teaching competencies, based upon demonstrations that children learn with the help of the would-be teacher or that he exhibits behaviors which research shows have positive correlations with children's learning or, if this is not possible, that he can demonstrate that he has acquired the knowledge that one associates with the ability to teach. Most of the 'models' call for a higher degree of self-pacing and self-direction through a series of learning modules.

The 'models' call for arrangements with these schools which are variously referred to as a 'center of inquiry' or a 'portal school' or a 'multi-unit school' or a 'protocooperative'. Such schools serve as a training center for teacher interns and for the retraining of regular teachers, aides, department heads and the like. Generally, they have links with the regional laboratories and R&D Centers and, thus, provide a point of

entry for new curricula and new teaching methods or new staffing patterns and new links with the community. The portal or multi-unit school generally includes a capability for adoptive or adaptive or developmental research in connection with new curricula or methods or staffing patterns. These schools rely upon close ties with the community. And the fiscal arrangements as exemplified by the Philadelphia Portal Schools or the Wisconsin Multi-Unit Schools call for internship and retraining which is largely, if not entirely, provided within the conventional school budget. This not only makes it possible for Teacher Corps funding to cover the start-up costs of a teacher education program based upon the 'models' but also for the startup of the portal or multi-unit school system which is part of the plan. It makes possible the phased withdrawal of Teacher Corps funding in such a way as to insure the continuation, under local funding, of the features which have proved themselves during the trial period.

Probably most important of all, the 'models' call for a plan for adoption, generally a plan for a 'temporary organization' or parallel program of teacher education, a program whose features will be adopted for all teacher education at the university if the experiment proves successful on a cost-effectiveness basis. The plan generally covers a span of four to six years and includes a process for systems management and discrepancy evaluation. The criteria by which the decision will be made as to whether or not to adopt the features of the experimental effort are set forth in the plan and the people who will make the decision to adopt or not to adopt are identified. The system of discrepancy evaluation which will be employed is set forth in some detail; that is the system by which it is possible to determine at any point in time how well the actual performance in carrying out the plan corresponds to the expected achievement at that time.

Teacher Corps funding will, therefore, be provided to school systems and universities which join together with their universities and state departments to develop such plans and the systems for their management. Past experience has demonstrated rather clearly that, where the Teacher Corps is seen as a kind of domestic Peace Corps in education or as a prospective teacher fellowship with emphasis on internship, relatively little is accomplished beyond the services provided and the attracting to education of some promising young people who might not otherwise have come. Only if the Teacher Corps is seen as a means for colleges, school systems, communities and state departments to test out some ideas they want to test--ideas based on the 'models' and 'portal schools'--along with a greater emphasis on learning from the community, does a Teacher Corps project earn its way. For this reason, sixth cycle projects which seek these objectives will be funded and all fourth cycle projects which are seeking continuation should

begin now with program development and staff and faculty training. Only fifth cycle projects which seek these objectives and have demonstrated progress towards their achievement will be encouraged to submit seventh cycle proposals.

In amendments to the Teacher Corps legislation passed within this year, the Congress expressed its intent that the Teacher Corps provide support for cross-age tutoring and other forms of volunteer and semi-volunteer programs of service-learning. A second draft of guidelines for programs of this kind has been prepared and is attached. It appears likely that all programs assisted by the Teacher Corps could benefit from a service-learning component. We are prepared to offer whatever help is necessary in order to undertake an effort of this kind.

This new legislation reaffirms a part of the original purpose of the Teacher Corps--that of engaging the young in efforts to help solve our nation's educational problems. There are promising indications that the interns and experienced teachers who make up the professional core of a Teacher Corps project can help provide the training and supervision needed for projects of service-learning which will help to make part-time jobs or service-learning a part of growing up, a part of the education of all young Americans.

SECTION III: A DEFINITION OF COMPETENCY-BASED TEACHER EDUCATION

The following is a definition of competency-based teacher education which has become widely-used. It is taken from a slide-tape presentation, "Competency-Based Teacher Education: An Overview," which was developed for Teacher Corps by Wilford A. Weber of Syracuse University. The definition has been published elsewhere but the slide-tape script was its place of origin. Excerpts from pages 3 through 12 are presented here:

A competency-based teacher education program is a program in which the competencies to be demonstrated by the student and the criteria to be applied in assessing the competencies of the student are made explicit, and the student is held accountable for meeting these criteria. At first glance, this may appear a rather harsh, mechanistic approach to teacher education yet nothing could be further from the truth for the teacher competencies specified by those involved in the program are those particular attitudes, skills, understandings, and behaviors they feel facilitate the intellectual, social, emotional, and physical growth of children.

The criteria used in assessing the competence of the student are three-fold. First are knowledge criteria--used to gauge the student's cognitive understandings. Performance criteria are employed to assess his teaching behaviors. Product criteria are used to assess his teaching effectiveness; the growth of pupils he has taught are the evidence for this assessment.

The use of these criteria is not unique to competency-based programs. But where traditional programs give greatest weight to the teacher's knowledge, today the trend is toward stronger emphasis of performance and product. Clearly a personal storehouse of information doesn't alone make an effective teacher. What is most meaningful is the teacher's ability to facilitate the learning of children.

Traditional programs and competency-based programs differ in many ways. In a traditional program, time is held constant while achievement varies. The emphasis is on the completion of a certain number of courses regardless of whether the student acquires mastery in all areas of study. On the other hand, in a competency-based program, achievement is held constant and time varies. That is, the competencies to be achieved are specified and the student achieves those competencies at his own rate of progress. He moves as quickly as he wishes and is able.

Traditional programs place heavy emphasis on entrance requirements. Competency-based programs put greatest emphasis not on entrance requirements, but on exit requirements. Simple logic suggests that it is much more germane to examine an individual's abilities after completion of a program, rather

than before he has even entered it. Competency-based education assumes the obvious wisdom of this observation. One dividend of the competency-based approach is to open the doors of teacher education to enable individuals who might otherwise have been excluded from equal educational opportunities. Another dividend is to assure mastery of all competencies.

The competencies that the student is expected to acquire are made explicit through the specification of objectives. Two general types of objectives lie at the heart of competency-based education. The first are instructional objectives. Instructional objectives specify skills, knowledge, behaviors and attitudes to be acquired by the student. Three types of criteria are used in determining the student's level of achievement with respect to these objectives. For example, if the objective is for the student to describe the meaning of higher-order questions, knowledge criteria are applied. If the objective is to have the student demonstrate an ability to ask higher-order questions, performance criteria are brought to bear. If the student is to influence the behavior of children by asking higher-order questions, then product criteria are applicable.

The other set of objectives are expressive objectives. Rather than being competencies the student acquires, they are events he experiences. For instance, the student will read a story to a kindergarten child--while holding the child on his lap. Or the student will visit the home of each of his pupils. These are examples of expressive objectives.

The keystone of competency-based teacher education instruction is the instructional module. An instructional module can be thought of as a set of learning activities intended to facilitate the student's achievement of an objective or set of objectives.

The module consists of the following elements: first, the objective is stated clearly and made public thus making explicit the program's expectations of the student. Second, the pre-test, a diagnostic vehicle that determines what if any instructional activities he needs to experience. Then, the instructional activities, self-paced learning experiences intended to facilitate the student's achievement of the objective. When the student feels ready, he takes the post-test, designed to measure his level of mastery in relation to his objective.

Thus, the module approach enhances possibilities for self-pacing, independent study, individualization, personalization, and alternative means of instruction.

Some modules are brief--as little as thirty minutes--yet others may require days, weeks or months to complete. Instructional activities are carried on in diverse settings, ranging from discussions in the seminar room to microteaching in a public school classroom; the sensitivity training session in a dormitory lounge, to the tutorial in a church basement. As noted, the module approach makes possible self-pacing and alternate routes of instruction. Thus, the flexibility of the module approach appears attractive as an alternative to traditional "lock-step" curricula.

Usually traditional programs consist of rigidly separated disciplines. Within each discrete discipline are courses with particular foci. Due to the dearth of inter-disciplinary integration, many disciplines are walled off from all others. Ingrown interests may drift toward irrelevancy with respect to the student's needs in the real world. Furthermore, overlapping, as well as dangerous gaps, appear in the student's learning.

In a competency-based program, however, the interdisciplinary approach is preeminent in the design of the curriculum. Related objectives are grouped in a single module; related modules are then clustered as components and the components may be given discipline-like labels.

As teaching realities shift--in a world of rapid cultural and technological change--modules, more easily than courses, can be deleted, added or modified to keep abreast of reality.

Besides giving the student greater flexibility in pursuing learning activities, the modular approach also affords the virtues of self-pacing and alternate routes of instruction in the program as a whole.

In traditional programs, a student's time is rather rigidly allocated, with the bulk spent in attending classes and doing homework. In a competency-based program, the student is free to plan his schedule of activities around his needs and interests while working toward the achievement of specific competencies.

Money and student time represent important resources in any teacher education program. Generally, traditional programs have given highest priority to financial considerations. While recognizing realistic fiscal parameters, competency-based programs reflect a concern for maximizing the use of student time--the crucial resource never to be squandered.

Traditional programs find the student largely rivitted to the campus. Contact with children is restricted to the short, senior-year student teaching experience, while independent-study opportunities are of a homework-assignment variety. Precisely because they are reality-oriented, competency-based programs require that students spend proportionately more time interacting with children. The public schools provide the best setting for student-child interaction.

A field-centered curriculum calls for a progression of early-awareness experiences, tutoring, micro-teaching, small-group and total-class teaching responsibilities throughout the student's professional education. And post-baccalaureate internships are a part of the growing trend toward field-centered curricula. Increasingly, programs will provide for resident internships beyond the bachelor's degree for purposes of specialization.

In traditional programs, many faculty hours are spent in lecture situation. Consequently, the faculty member often stands remote from the student. In a conscious attempt to overcome this, the modular approach emphasizes small group work, seminars and counseling. These experiences provide far greater opportunities for closer faculty-student relationships.

And better faculty-student rapport increases possibilities for personalization of the student's experience.

Furthermore, competency-based teacher education prompts more efficient utilization of staff. Differentiated staffing patterns in higher education allow personnel from a wide range of sources to bring into harmonious balance their various teacher-educator roles and their individual interests and expertise.

The competency-based approach allows faculty members to escape from the mire of grading, attendance keeping, and other numbing clerical routines, freeing them for more creative roles. One example of such roles is found in faculty collaboration with materials production specialists in the design of educational materials utilizing the new technology.

The sharing of program responsibilities represents a growing trend. In the past, the college or university has borne sole responsibility for the teacher's education. It cooperated only in a limited way with the public schools, jealously excluding from the decision-making process other organizations with estimable investments in teacher education and the education of children. From traditional inwardness, today we are moving toward the sharing of decision-making responsibilities by all who are directly or indirectly concerned: the college, the students, the public schools, and the community, educational governmental agencies, state departments of education, philanthropic foundations, the information and educational industries, teachers' associations and other professional groups.

A further way in which teacher education may be kept relevant in a changing society exists in the benefits to be derived from systems-analysis approaches in program design, development, and operations. Formative data provide feedback concerning both student and program progress thus facilitating data-based decision-making regarding the appropriateness of program objectives, the adequacy of instructional activities, and the effectiveness of program graduates. Thus a competency-based teacher education program remains an open system, capable of regeneration in the face of change.

SECTION IV: THE EMERGING NATURE OF THE WESTERN WASHINGTON STATE COLLEGE PROGRAM

This section presents a description of the program development process which characterizes the Western Washington State College project. The description provided here was abstracted from a paper prepared by Robert M. Rice, a member of the project's evaluation team.

As noted in Section I, one of the major objectives of the Western Washington State College program was to use and test certain aspects of the ComField model and philosophy. These indicated that the program needed to be: (1) field-centered, (2) competency-based, (3) systematically managed, and (4) individualized. The excerpts which follow explain the position taken by program personnel as they attempted to make those ideas operational.

Introduction

The concept of an emerging program was a manifestation of the Western Washington State College Teacher Corps staff's interpretation of the ComField philosophy. This is a program in which interns have considerable say over their training and the structure of the program according to their own experiences and values. It was a strong intuitive belief on the part of the college staff that decisions made in this manner lead to greater assimilation and retention of what is studied, greater disposition to apply what is learned, and a more self-sufficient continuing student of the education process. It may lead to an investment that will encourage better communications between interns and staff. This improved communication can improve the quality of teacher education by clarifying perceptions of what it would be and can strengthen commitment to a particular plan of teacher education. This goal was largely accomplished by making interns voting members of most policy making committees, by a college staff sensitive to intern needs, and by formative evaluations.

The movement to decentralize the decision making from the college to the individual districts is often dealt with separately by college staff members but is considered a broader interpretation of the "emerging nature" by the evaluation team. Briefly the program was decentralized and made more field-centered by giving each local district policy making authority for its own intern team. This was accomplished by creating local Policy and Selection Committees composed of interns, community representatives, professional association representatives, cooperating teachers, college staff, and local administrators. Such a composition was expected to facilitate a broader base for needs assessment and a greater commitment by the various groups in the project.

Strengths of the Emerging Program Concept

1. The "emerging nature" of the program has provided interns with an opportunity to direct their own professional training. Interns are expected to establish their own performances by proposing objectives to the local committees.
2. The "emerging nature" of the program has provided various groups, teachers, community persons, and professional association representatives, with an opportunity to control teacher preparation directly. In Anacortes the coordinator was a moving force in getting interns to state their performance goals in behavioral terms. Also the community representative was instrumental in getting interns to visit disadvantaged homes so they could learn about the target population.
3. Intern needs have often been perceived and accommodated than would have been the case in a traditional program. The change to the M. Ed. option is an example of this flexibility.
4. Morale among interns has been maintained at a relatively high level. Representatives of this project were impressed by the plethora of staff-intern conflicts reported at the National Corps Conference in Norman, Oklahoma. This has not been the situation in this project. It is felt that the ability to clear the air through open discussion has maintained relatively high morale in this project.
5. Each team has been allowed to develop its own unique program that reflects its district's needs. The direct influence of local groups in the governance of the teams and the independence of each team has maintained local needs as paramount concerns. In Mt. Baker, for example, a core teaching program for seventh grade students has been a pet hope of local elementary principals for sometime. The Teacher Corps team will make this hope a reality in the 1971-72 school year.
6. The teams have had the opportunity for a firm foundation in team cooperation as the team leader has been seen as a team member rather than in a strictly leadership role. In one district where the team leader saw himself as separate from the interns there was a morale crisis.
7. A more balanced evaluation of the intern team efforts is possible in an "emerging" program using broad decision making. For example, in Ferndale, the interns were subjected to some criticism by public school teachers. However, the Indian representatives balanced this criticism by pointing to the many positive contributions to Indian education made by the interns.

Weaknesses of the Emerging Program Concept

1. An "emerging" program is inefficient in terms of management. As

Dr. Burton Grover, Program Development Specialist, stated in an October 30, 1970 memo to the Teacher Corps community: "The fact that Western Washington State College has an 'emerging' program, that is, one in which decisions about training are broad-based and made only as instructional needs are perceived during an on going program, poses a very difficult problem for 'efficient' management, unless one believes that good instructional resources for teacher training can be made to pop up overnight. The problem is that effective teacher training resources often need to be planned and developed in advance of the time that a decision is made that there is a need for the resource. Because of this difficulty, present plans for management refer only to the instructional part of the program; later they may be expanded to include school utilities and community projects and all overlapping parts."

2. Roles in an "emerging" program are not adequately defined. Serious problems with the school personnel not understanding their roles or the interns' role within Teacher Corps have contributed to a breach between teachers and interns in Marysville and Ferndale. Preservice conferences for teachers, community representatives, interns, and school administrators should be instituted to define roles.
3. A systematic inventory of teaching competencies has not been established and it is doubtful if all interns will "emerge" as teachers with such an inventory of competencies. There may be a conflict between a competency-based teacher training program and an "emerging" program.
4. There have been few standards for intern performances established by the local committees. For example, the local committees have largely relied upon college recommendations for the Temporary Teaching Certificate for the school year 1971-72. Also no local committee has seriously tackled the question of intern deselection. Those interns who have left the project have been deselected by the college staff or have voluntarily left the project. This leaves interns and others unclear as to grounds for deselection as this decision is made at the time of a crisis. It may be difficult for an intern to know what constitutes behavior requiring deselection until he has committed the offense.
5. More emphasis has been placed upon intern needs than upon the needs of other parties. For example, many more decisions are based upon how the interns will react than on how school children will react. Also, in Mt. Baker, for instance, the community representatives have had little influence upon the program.

While the project has been responsive to intern needs, it has been less responsive to school needs. Interns have felt a clear duty to respect Indian culture, but have not felt a

concomitant need to respect the public schools, public school teachers, or administrators. The college staff has not been as responsive to local feelings on this matter as it has to intern feelings. As a result, the Marysville School District and the Ferndale School District have asked their teams to leave.

6. The local committee process, while technically the major decision-making organ, can be overruled by traditional decision-making apparatus. In Marysville a local conservative parents group pressured the local school administration to bypass the local committee and deal directly with alleged intern misconduct. Ultimately this breach of procedure lead Dr. George Lamb, Director, to recommend that the project be discontinued in Marysville. The school boards in each participating district should invest the local committees with the power they now are purported to have. As it is now the Teacher Corps Policy and Selection Committee delegated these powers to the local committees.
7. The "emerging" concept seems to have been a college attempt to abide faithfully by the field-centered features of ComField rather than an attempt by "interested groups" to have a say in the project. One may consider whether grass roots action is better than outside forces (college and Teacher Corps) establishing local needs and processes to solve local problems. As it is now, much of the Teacher Corps program has been outside forces identifying and attempting to solve local problems. Local identification and solution of local problems might be more desirable.

Summary

The "emerging nature" of the Western Washington State College Teacher Corps Project involves needs assessment input from interns and a broad decision-making network involving many interested groups. The Teacher Corps has been more responsive to some local needs and morale has been maintained by giving all groups a voice in the program. On the other hand, the concept is less efficient, lacks clear role definitions, and lacks clear performance criteria.

SECTION V: PROGRAM PRIORITIES AS VIEWED IN THE WESTERN WASHINGTON STATE COLLEGE PROGRAM

This section reports the results of a survey which was conducted by Dr. Burton L. Grover, Program Development Specialist for the Western Washington State College program. Faced with an apparent lack of agreement concerning the goals of the program on the part of those involved in the Teacher Corps program, Dr. Grover set out to determine the nature and extent of that disagreement. The following is an abstract of the September 1971 report of his study.

Introduction

The Fifth Cycle Teacher Corps program at Western Washington State College started out complex, and it seemed to become more complex as time went on. By the eighth month this complexity seemed overwhelming. Part of this complexity stemmed from the fact that many people of many different involved groups had different expectations and aspirations for the program. The national Teacher Corps office provided some directions, the local College provided others, the staff of the program added some more, interns with encouragement had generated their own set of expectations, and the program had contact with several persons in and around the local schools with their priorities. No one seemed to be able to talk about the program in such a way that all different goals and facets were kept in perspective. Discussions of issues in various groups, ranging from the interns to the Education Graduate Committee, seemed to illustrate the seven blind men and the elephant.

For instance, the national office had in the past strongly emphasized community action, and this past year had increased its emphasis on competency-based education and systematic management. By the end of the year they were emphasizing portal schools and training complexes. Institutional change seemed to be strong as far as the interns were concerned, while the college staff had been pushing a concept of an "emerging" program and field-centered control.

Program complexity was accompanied by considerable turbulence during the first year. There were instances of unclarity and confusion, the eventual termination of Teacher Corps in two out of the four school districts, and anguished staff discussions about which goals were not being met. At about the eighth month both the turbulence and the complexity seemed related to the fact that different groups emphasized different program goals. There just seemed to be too many goals to explain, much less attain, and good feelings among groups were not promoted by unstated, unmet, and not-agreed-upon goals.

For the reason of the complexity of program goals, limited resources to meet them, and suspicion that priorities substantially varied among individuals and groups, it was decided to survey persons locally about the program in regard to what goals were of greatest importance to them. The job was to find out who emphasized what program objectives most strongly and on what points there was the greatest agreement or disagreement concerning importance. In other words, the job was to map out the priorities of the program as viewed by all locally associated with the program.

Procedures

Instrumentation. An 18-item questionnaire was devised and revised on an armchair basis. Each of the items represented a program goal stated at one place by one body or another.

The items overlapped and fell into clusters according to their content, but each item had a unique facet. For instance, one item related to emphasizing good education for Indian children while another item was considerably more specific, by stating reduction of the dropout rate of Indian children in schools as a goal, the latter being a stated objective of one of the school districts. (There was also a general to specific variation between other items, such as one which covered the implementing of a national model for teacher education while another had to do with field testing training modules of the national model.) According to intended content, there were five overlapping clusters of items with three additional covering isolated matters: (1) Four items indicated children in the schools and their education as a priority, (2) four items had something to do with teacher training program development of both local and national significance, (3) three items had to do with the affecting of schools and the communities in which the programs were located, (4) three items had to do with the actual interns who were in the program, and (5) four had something to do with College concerns regarding teacher training programs. Isolated items dealt with giving assistance to teachers, recruitment of talent into the profession, and the emerging nature of the Western Washington State College Teacher Corps program. Some items were related to more than one of these clusters, with each item giving some unique twist that attempted to represent the feelings and statements of some person or group associated with the program at some time.

The problem posed to the respondent by the questionnaire was that there were limited resources with which to carry out the program and that not all goals could be expected to be fully realized, given the resources available. Consequently, the respondent was asked to indicate which goals deserved the highest priority, namely, the most resources committed to it, which goals are of second order of priority, and so forth, down to the lowest level--the respondent was asked to list them on five levels so that there was a five point scale for the questionnaire. A distribution of a respondent's responses was forced in the sense that a maximum and a minimum number of items were requested to be placed in any

one priority level. Respondents were asked to place one to three goals in the top and the bottom priorities, two to five in the next to top and next to bottom, and four to nine goals in the middle level. Whether or not this forced variation that was not there is not known on the basis of any of the results; this investigator believed that such variation intuitively was real and not artificial. If this intuitive feeling is wrong, at least a consolation is that we on the staff have to make choices so why shouldn't the respondents.

There was no avoiding the likely possibility that the wording of various items affected the responses for reasons other than the intended goal that the items supposedly represented. Limitations prevented checking out and correcting this likelihood by empirical means (and this was part of the reason for having some clusters of overlapping items). Listed below are abbreviated labels for the goals represented by the items. The listing is in order of the sequence of items given on one form of the questionnaire.

1. School-community relationships.
2. Teacher training for disadvantaged children.
3. Indian children dropout reduction.
4. Field-centered master's program.
5. Systematic management.
6. Disadvantaged children (all).
7. Disadvantaged children (Indian).
8. Intern training.
9. Implementing competency-based national training model.
10. Broad participation in teacher training.
11. Field-testing teacher training modules.
12. Defining master's level teaching competencies.
13. Individualization of teacher training.
14. Helping teachers do their job.
15. The "emerging" program concept.
16. Recruitment of talent into the profession.
17. Institutional change in schools.
18. Institutional change in college teacher training.

There were two forms of the questionnaire which differed only on the sequence of items and on the color of the paper on which the questionnaire was printed.

Population and Sampling. An attempt was made to get all persons who were associated with the program locally. responses from Ninety-five

persons responded. These included five persons of the Graduate Committee of the Department of Education, all four of the College staff members associated with Teacher Corps, and seven out of twelve persons sampled randomly from the Department of Education faculty (some departmental members did not respond claiming complete ignorance of the program).

Two of the four school superintendents associated with the program responded, as did all four coordinators and three of the team leaders. All interns in the program responded; (we were able to get them as a captive audience).

In order to get a reflection of different teachers' opinions and yet be able to keep some track of those who were most closely associated with the program, responses were secured both from "cooperating teachers" who worked more closely with interns, as well as from other teachers in the same buildings. Sampling and getting responses from these "other teachers" was not easy, but we nevertheless obtained 15 of these responses-- four from Ferndale, five from Marysville, one from Anacortes, and five from Mt. Baker. Fourteen cooperating teachers responded: four from Ferndale, four from Marysville, four from Mt. Baker, and two from Anacortes. In addition, three professional association representatives responded.

Interns and teachers indicated the school districts from which they came, but not their names. Other categories, such as coordinators, team leaders, professional association representatives, were not asked for their school districts as this would identify them by name.

Rounding out the total of 95 respondents were six building principals, five community representatives, and the Graduate Dean.

Perhaps the most unfortunate limitation of the sampling was the low number of community representatives that were asked to respond, but it was not feasible to obtain more. It would have been good to have larger representation both of Indian and of white community representatives. The Graduate Dean represented a 100% sampling of that particular population. Because of the low numbers of some of the categories, particularly community representatives, inferences and conclusions about separate individual groups are rather chancy.

Timing. The first persons to complete the questionnaire were team leaders, college staff, and interns in March. Other responses were obtained during March and April with a few coming in as late as May of the first year of the program.

Analysis. The data analysis was basically descriptive following some preliminary attempts to assess possibly statistically significant trends in the data associated with various groupings of respondents and item order. The basic analysis involved rehashing of the data, all the time hoping that descriptions and interpretations were of something

other than random variation (statistical "error"). Various aspects of the data were examined. First of all, the average response to each item was examined to find which things over all were accorded greatest value. This was done using individual responses (N = 95) and also using the average of group averages (since there were unequal numbers of respondents in each of the groups, the two would not necessarily be the same). The grouping of respondents was somewhat arbitrary, and consequently two different ways of grouping respondents were used. One way broke down the respondents into 19 groups. This grouping, reflected in Table II, included four intern groups (one for each school district), three groups of cooperating teachers, and three groups of other teachers (broken down by school district, but two school districts were combined because of the small number of respondents from each). The ranking of the items according to means by individuals or by group means was compared; differences in rankings would indicate where a group of persons who had a large number, such as the interns, would influence the average of individual responses more than where that group was given equal weight with smaller groups--particularly in the second way of grouping respondents which had six groups: one for College people, one for school teachers who were cooperating, one for other teachers, one for school administrators, one for the small number of community representatives, and one for interns.

In order to find which goals were more controversial, the variation of the responses to each item was examined. The variance of responses to each item was computed three times using individual responses, using the means of the first way of grouping (19 groups), and the means of the second way of grouping (6 groups). Those items which had a larger variance indicated goals about which there was greater disagreement on importance--possibly an indicator of potential sources of controversy.

Variance of individual responses would, within limits of statistical error, bring about variance of group mean responses to items. However, in some cases the ranking of an item according to variance could be greater when mean variance was considered compared to individual response variance. If this difference were marked--more than expected by chance fluctuation--it would suggest that the item divided groups rather than individuals--and that the goal could be a source of conflict between groups such as interns vs. teachers or college vs. school administrators.

Time and available computer program limitations prevented exact tests of significance regarding either for between group differences for individual items or for equality of variances of individual items. Consequently, it was never certain when interpretations were being made of what was essentially random fluctuations. However, an analysis of variance with a between group factor and a within person measure (items) was computed to get some idea of significance of between-group differences (through the group X item interaction effect). This analysis still left some ambiguity, unfortunately, because the requirement of equal numbers in groups caused some loss of data and arbitrary groupings and because an exact critical significance level

was not known--and the analysis was designed to yield a statement of significant interaction overall, not for individual items.

Despite the difficulties of making exact statistical statements about the probability of real differences, dropping back to an eyeball, descriptive level gave an intuitive confidence that differences between groups and item variances were from something other than chance.

Another analysis was run to see if item order (between two forms of the instrument) contributed to the item and group differences. Here again the exact critical F was unknown and responses had to be estimated or dropped to perform the analysis, so the result was ambiguous other than suggesting that item order at best was a minor contribution to the pattern of results.

Finally some of the individual groups of respondents were examined to see where they lay in comparison with other groups on particular items, and to see if some groups had more extreme types of responses and on what items they had extreme types of responses. An item by item diagram mapping out the mean responses of the various groups (considering the six larger groups) illustrated where groups varied as well as differences of means and variances of separate items.

Results

Relative Importance of Various Goals. The goals fell into four clusters when the averages of 19 groups were considered; the pattern was generally the same when the averages of individuals were considered, but the clustering was not as apparent for the lower-ranked goals; the averages of the six larger groups were not notably discrepant from the others.

The top cluster, namely the highest-ranked goals-priorities, were three: school-community relationships, better education for all disadvantaged children, and high quality teacher training for interns in the program (this item was intended to separate out training for interns in program from program development for future interns).

The second cluster, those goals given moderately high priority, included five items: broad participation and control of the program, individualized and "personalized" teacher training, teacher training for disadvantaged children, changing College ways of training teachers, and Indian dropout rate reduction (which had had a slightly lower rating when individual responses were considered).

The third cluster of items indicated middle and low middle priority: helping Indian children (this perhaps was given lower priority because some of the school districts did not have Indian children enrolled), changing school educational practices ("institutional change"), and recruiting talented persons into the profession.

The lowest-ranked cluster of items included seven items for which average responses ranged from 1.3 to 1.7. These included items having to do with systematic management, implementing a competency-based national model of training, the emerging program concept, defining master's competencies, helping teachers, field-testing training modules, and implementing a field centered master's program. When looking at individual responses, these items did not cluster as neatly and were spread out more, ranging from 1.2 for a field-centered master's program to 1.86 for the emerging program concept. However, within this range the same items were included. The three lowest using either ranking were field-centered master's program, field-testing modules, and helping teachers to do their job.

Disagreement About Priorities. The indicator for disagreement on goals in this study was the variation of responses to individual items. Higher variances (or standard deviations) suggest higher disagreement. Variances for each item were estimated three times using individual responses, using group mean responses for the 19-way grouping, and using the group means for the six-way grouping.

Items were arranged according to ascending order of variance for individual responses and for each of the group mean responses. Therefore, a particular response had a high variance for individual responses but a somewhat lower variance for group mean responses; this would indicate the disagreement was relatively evenly distributed among all groups and tended to reflect more person vs. person differences in values. On the other hand, an item which ranked higher on group mean variance than on individual response variance suggested that the disagreement was more between groups, such as interns versus school administrators, than between individuals within groups.

On all three rankings, the item which had to do with the idea that Teacher Corps could be used to change schools had the highest variance (a result which corresponds with intuitive impressions gained during the second half of the first year of the program). This item was in a group by itself as far as clustering of items according to variances. Interns (except for Mt. Baker), college staff, team leaders, and principals rated this item high. Other groups' averages ranged downward. Both cooperating and other teachers gave this goal moderate priority with the sharp exception of Marysville teachers who rated it quite low.

Looking at individual responses, the remaining items fell into four clusters. Two items had a fairly high response variance: the emerging program concept and recruiting talented people into the profession. Next came a cluster of six items which included helping teachers, changing college practices, systematic management, field-centered master's program, testing out a competency-based national model, and Indian children. Dropping down, a cluster of five items had low middle individual response variance: broad participation in a program, teacher training for the disadvantaged children,

field-testing modules, individualized teacher training, and defining master's competencies. The last items, those having the lowest variance and presumably the greatest agreement about priorities, were those having to do with Indian dropout reduction, providing good teacher training for interns, involving school and community, and helping disadvantaged children. It should be remembered that high or low rankings here do not mean high or low importance accorded to the particular item; a high ranking means that there is a lot of disagreement about the program, a low ranking means that everyone was pretty well agreed on whatever importance was accorded to this particular goal.

Looking at the ranking of variances according to group mean responses when the first (19 way) grouping was used, three discrepancies of four or more places from the individual response variance were noted. Group mean variance for the item of changing college training procedures was less variant suggesting this was more a thing that individuals disagreed upon than groups. Training for the disadvantaged and individualized-personalized training elicited more variant responses among groups than among individuals within groups.

When the means of the six larger subgroups were considered, four items had response variation notably different from the other (individual and 19 group) ways of computing variance. Recruiting talent into the profession and systematic management were less variant; implementing a national training model and individualizing-personalizing teacher training were more variant. For these goals, combining smaller groups into larger ones obscured group differences for the first two and accentuated group differences for the latter two. Other differences in ranking were less noticeable and more likely attributable to chance.

Group Differences. Perhaps one of the more revealing ways of examining the data is to look at each group and see where its more extreme responses (either high or low assignment of priorities) compare with the other groups. The results for the six-way grouping (which, again, do not include all respondents) are presented in Table IV. This particular table or graph presents each item, the range of group means for each item, and how the groups compare on each item.

In studying this Table, it must be kept in mind that the variation of mean responses will be greater for those groups that have smaller numbers because of the central tendency principle. A group such as community representatives which has only five persons can be expected to have its mean responses vary more and more easily be extreme than a larger group, such as interns which included 26 respondents. If for any particular item the interns are most extreme, it is even more extreme than one might suspect because it is harder to find 26 persons agreeing among themselves than smaller-sized groups. What follows is a group by group description.

1. College (sample of faculty and Education Graduate Committee combined): This group gave the highest priority of the other five groups to systematic management (whatever happened to the

woolly-headed, ivory towered image--or are they just compensating?). They gave the lowest response of all the groups to helping Indian children (although they were not the lowest as far as helping all disadvantaged children in all districts).

2. School Administrators (superintendents, coordinators, and principals): This combined group of school administrators included two school superintendents, four coordinators, and six principals. This group assigned the highest priority of all other groups to four items. These were the items having to do with (curiously enough) testing out a national model for competency-based teacher training, having broad participation in the program, field-testing modules, and changing College training. They gave the lowest response of all the groups to Indian dropout reduction and recruitment of talent into the profession. In addition they tended to be low on the items having to do with helping teachers and the emerging program concept. On one of the items for which they scored the highest score, that having to do with broad participation, they were very close to three of the other groups. The administrators were second highest on the controversial changing schools item; this was because of the responses of the principals, not of the superintendents and coordinators.
3. Interns: From the size of this group, $N = 26$, one might expect that they would have very few extreme responses compared with the other groups to any of the items. However, some familiarity with the interns would lead one not to be surprised about the fact that their average was extreme on eight goals, despite their numbers. The interns scored highest on items having to do with Indian dropout reduction, helping all disadvantaged children, defining master's competencies (which contrasted with their low responses given to implementing a field-centered master's program and field-testing training modules), the emerging program concept, and, importantly, changing schools. The interns, of all the other groups, gave the lowest responses to systematic management, field-testing modules, and helping teachers.
4. Cooperating Teachers: The group of fourteen cooperating teachers scored the highest of all groups in response to developing an individualized-personalized teacher training program. They scored lowest of the groups on helping all disadvantaged children (all of the groups' responses were high and close to each other on this item), training for those interns in the program, and implementing a national model for training (another group, the community representatives, were close to the cooperating teachers on the low response and for this item).
5. Other Teachers: There were fifteen teachers who did not cooperate directly with interns but were sampled from the

remainder of teachers on the building staffs. This group scored the highest on the intern training (note the contrast with cooperating teachers on this item) and recruiting talent items. This group scored lowest on school-community relationships, training teachers for teaching the disadvantaged, implementing a field-centered master's program, and defining master's level competencies (this group was close to other groups on the latter two items).

6. Community Representatives: This group being small ($N = 5$) could be expected to give extreme responses compared with other groups that had larger numbers simply because they were small rather than the extremity of their thoughts. This group of five also included an uncertain mixture of Indians and non-Indians, critics and supporters of the program. Most, if not all, were members of the local Teacher Corps committees. This group scored highest on school-community relationships, training of teachers for the disadvantaged, a field-centered master's program (they gave an average priority--quite a bit different from the other groups which gave considerably lower than average responses), helping Indian children, and (notably) helping teachers. The items on which they gave the lowest responses were an interesting and probably revealing collection: broad participation, the emerging program concept, changing schools, changing college, and individualizing teacher training. Regarding broad participation, one might refer to the first year evaluation report's caustic comments about the origin of this goal. Also, the community representatives appeared something less than enthusiastic about changing schools and colleges through Teacher Corps.
7. Smaller Groups: Looking at some of the smaller groups from the 19-way grouping of respondents can provide some revealing, if chancy, sorts of trends. It is admittedly rather tedious to describe all mean responses group by group. Nevertheless, some of this should be done because the 6-way grouping combines some groups that are not similar in their thinking. For instance, it is not to be expected that in the college the Graduate Committee would think the same way as the sample of education faculty not on the Graduate Committee. And, the Teacher Corps staff, hardly homogeneous within itself, was not included in the 6-way grouping and should be examined to see how their responses compare to the other groups. Again, it should be recognized that a smaller group will tend to vary more from the larger group and give more extreme responses simply because of the smallness of the numbers.

Concerning the Teacher Corps staff, they varied from the larger groups on certain items. They were higher than the six groups mentioned before on systematic management, helping all disadvantaged children (close to the others), broad participation, individualized teacher training, the emerging program concept (they were close to interns on this one), and close to the interns at the top on institutional change

in the schools. The staff was lower than the other groups on school-community relationships, intern training, defining master's level competencies, and helping teachers.

The Education Department's Graduate Committee, part of the group listed before as College faculty, responded higher to the items having to do with systematic management and defining master's level competencies. This group scored lower than the other larger groups on the item having to do with disadvantaged children (close to the others). By not varying from the other groups on many items the Committee revealed itself to be cautious or prudent or conservative or something.

The three team leaders who responded gave high extreme responses to items on systematic management, training for interns, broad participation, and changing school practices. It was interesting to note that they were high on both institutional change in the schools and on intern training. They did not, apparently, sense a dichotomy between these two goals such as was apparent with other groups, including the Teacher Corps staff.

The Graduate Dean's responses were generally consistent with the responses of the other respondents except for higher valuation given field-testing modules and implementing a field-centered master's program, and lower valuation given to the emerging program concept and institutional change in the schools. Besides field-testing modules he gave highest value to school-community relationships and intern training.

Discussion

The reader is invited to make his own conclusions and speculate about the results before reading this section. He may do so after examining some of the key tables, the questionnaire, and some of the statements of the results. What follows in this section is a single investigator's interpretations, and they are best treated as only a partial interpretation comprised of an uncertain mixture of subjective biases and legitimate inferences. They can be examined critically by the reader best if he has already formed his own interpretations against which to compare these conclusions.

Overall the things that seemed most important to all the respondents had to do with helping the children potentially affected by the program; emphasizing Teacher Corps as a training program here and now, one with individual attention to interns; involving the community in the training program; and changing college techniques for training teachers. A good share of the goals given the lowest priority rating were those which seemed somewhat more removed from persons and closer to program development, more recent additions to the Teacher Corps philosophy, and those which have seemed to emanate from the national office or, in one case, from the local Teacher Corps staff. These included such things as defining an M.Ed. program and its competencies in the field, testing out a national model, field-testing modules, using systematic management,

and the emerging program concept. These things apparently did not excite the respondents as much as what probably would be the more obvious objectives of the program. The national office has spent some time in setting up meetings to get across the priorities of elementary training models and competency-based education. Whatever effect these meetings have had on those attending, this enthusiasm has not been passed on to others locally associated with the program. This is so either because these objectives have not been explained clearly and consistently enough so that persons in the field grasp their dimensions, or because there has not been any latent enthusiasm for these types of ideas. On the local level the emerging program concept goal also appeared either to have not been explained well enough or have failed to elicit enthusiasm because it was associated with being unplanned and haphazard.

Those objectives which seemed to be more explicit in the original Congressional legislation, those having to do with disadvantaged children, intern training, and perhaps change in school practices for the disadvantaged, fared better than those strictly associated with the national office. One might speculate that Congressional actions more than executive interpretations reflected popular grass-roots feelings; (this is going a bit beyond the data). At any rate, this gives some credence to disgruntled comments by persons in other Teacher Corps programs to the effect that the goals of the Teacher Corps office tended to reflect which book Dick Graham had last read. It should also be considered that everyone can support "motherhood" objectives of helping kids and making better teachers, but it is harder to sell esoteric means (like systematic management or "national models") of accomplishing the ultimate objectives.

High response variance could reflect at least two possible things: (1) that an item was controversial, or (2) that an item reflected a goal that was not familiar or understood and responses varied quite a bit at random; in other words, an item's variance may or may not reflect an emotional charge associated with the goal. Nevertheless, items with high variance had the potential of being an emotionally charged issue on which persons would tend to disagree. It was not surprising, then, to find institutional change in schools as the most variant item, nor in light of the problems of the second half of the first year was it surprising to find that the interns as a group bought this hook, line, and sinker, and that they probably view themselves much more as change agents than persons who had been in schools for some time. What was surprising was that school administrators also viewed the program as being a change agent type of a thing, and one might possibly guess that the presence of the Teacher Corps in a school system could have uncovered a conflict between administrators and teachers about how fast certain things should be changed and who should do the changing. If this were so, the presence of the Teacher Corps interns would have complicated a possibly otherwise muted conflict and made it difficult to deal with. To this investigator's knowledge, this possibility was not discussed during the year and is admittedly quite a speculation. However, it is a fact that interns, Teacher Corps staff, and administrators gave institutional change high priority, while the College and cooperating teachers gave it only middle priority, and other teachers were decidedly

less than enthusiastic about the idea. What was notable was that the small group of community representatives decidedly did not view the Teacher Corps program as a change agent. They gave this item the lowest priority of any item by any group when six groups were considered.

Other relatively controversial items included helping teachers, viewed as moderately high importance by other teachers and by community representatives (consistent with their low regard for change in the schools) and low priority by interns, administrators, and the Teacher Corps College staff, all of whom rated it a flat 0. Individualization of teacher training had a somewhat wide variance because of a low response given it by community representatives. Testing out a national model for teacher training had a wider variation than average, mostly because of the rating by administrators; they gave this item a higher rating than all other groups including College faculty. One can only wonder the reasons for this, if it is anything other than accidental variation; it appeared as if the college is not quite so sold on the idea that models are needed to change their programs as much as administrators in the field. Also, the school administrators were considerably different than their teachers on this goal. Maybe it has something to do with understanding the concept of a "model."

The goal of using the program as a means to train persons particularly for teaching disadvantaged had moderately high priority from four of the six groups, but non-cooperative teachers rated it quite a bit lower and community representatives rated it quite a bit higher. Although community representatives on other items did not see the program as changing schools, apparently they saw a need for specific training in this area, and it may reflect a latent dissatisfaction with one facet of how the school is doing its job which is not shared by those teachers not directly working with the program. Is there a need for special training for teachers of the disadvantaged? Some teachers didn't think there was much; the five community representatives did.

Those things that reflected a middle degree of variation of responses included most of the things emanating from the national office and some of the original aspirations of the local College persons who worked on the proposal, namely systematic management, the national model for teacher training, field-centered master's program, as well as changing of College and helping teachers. This may have reflected varying degrees of understanding and acceptance of aspirations emanating from above.

The emerging program concept also was controversial, having the second largest variance of all items according to individual responses. There was relatively general agreement on the value of reducing the Indian dropout rate (moderate priority), having good training for interns, involving the school and community, and especially, helping disadvantaged children for which everyone rated high. (Who would ever admit hating poor kids, even to himself?)

When the interns were divided by various school systems they tended to disagree a bit on some items. Anacortes interns thought

more highly of systematic management; Marysville and Ferndale gave higher ratings to helping all disadvantaged children; Anacortes, understandably, was lower on helping Indian children; Ferndale was lower on broad participation--understandably since the broad participation did them in. Anacortes and Mt. Baker were much higher in defining master's level competencies. Marysville was higher on the emerging program concept. Mt. Baker was much lower on changing schools and Anacortes lower on changing colleges. While all intern teams could agree on some goals, there were between-team variations on others.

It is hardly possible to sum up all patterns in the data in one conclusion. Nor is it certain that the results, even if studied closely, can provide clear direction about the operation of the program. However, knowledge of some of the trends, such as controversy over institutional change, teacher-administrator differences, and low valuation accorded certain pet goals, could conceivably serve as a guide away from some pitfalls and toward actions which gain strong support.

SECTION VI. EXAMPLES OF INSTRUCTIONAL MODULES

This section presents examples of modules from each of the seven fifth-cycle Teacher Corps programs involved in the project. As you will see, although they vary in format from program to program, they do contain a number of common characteristics. An excerpt from the most recent edition of the Teacher Corps Guidelines is presented so as to clarify the position held by Teacher Corps relevant to the characteristics of instructional modules. This is followed by examples of instructional modules from each of the seven programs.

Teacher Corps Guidelines and Instructional Modules

The following is an excerpt from pages 24 and 25 of the October 1970 draft of the Teacher Corps Guidelines which describes the characteristics of the instructional module as:

1. An objective or set of objectives which specifies the competencies to be demonstrated by the student.
2. A pre-test designed to test the student's level of mastery relevant to the objective or objectives specified; if the student demonstrates that he has mastered the competencies identified, he receives credit and has the option of moving on to another task.
3. A series of instructional activities are designed to help a student meet the stated objective. These alternative routes to learning should allow for various learning styles. Many of the activities may be media-assisted. The student may also be free to negotiate other alternative learning experiences.
4. A student may proceed through a module at his own pace and may continue practice or study until he has reached an acceptable level of mastery.
5. A post-test is designed to test the student's level of mastery of the stated objective or objectives.
6. Recycling is possible for the student who does not reach criterion on the post-test.
7. The feedback of students and the continual evaluation of an instructional module means that it is continually being reexamined or redesigned to be more relevant to the student.

8. An eighth desirable feature of a module, not called for in all models, is a reference to research data which establishes correlations between the objective of the module and the learning of children.

Student competency may be judged on the basis of three kinds of criteria: knowledge, teacher behavior or performance, and product (children's learning). Competency-based programs should move towards behavioral criteria and product criteria in verifying teaching ability.

A module may be designed to take from two hours to two months of student time. However, it is usually of sufficient scope to encompass a meaningful learning experience and may be comprised of subsets of learning activities.

A provisional description of module format, a system for sequence and interrelationship of modules, and an explanation of the management and support systems for the modular program should be presented in the proposal.

Jackson State College

The instructional modules which are described here were developed for the Teacher Corps program at Jackson State College. The module examples presented are modules in the teaching of reading. The reading module descriptions are preceded by a description of the curriculum interns experienced in the Jackson State College program.

Specifications Developed for Interns. The following is a description of the curriculum developed for interns:

Component I: Instructional Organization

Module: Education 506: Art and Music in Childhood Education.

Module: Education 551: Recent Methods and Materials for Reading.

Module: Education 557: Problems and Issues in Social Science.

Module: Education 563: Problems and Issues in Science.

Module: Education 564: Current Trends in Mathematics.

Component II: Educational Technology

Although no courses are assigned to this context the interns will receive training in Educational Technology within the twelve hours of credit they will receive for internship. This training will take place on the campus and in the schools. When the regular courses on campus begin their transition to this type of instruction then modules will be developed which will fail within this context.

Component III: Contemporary Learning-Teaching Process

Module: Education 503: Seminar in Child Development.

Module: Education 504: Methods and Materials in Early Childhood Education.

Module: Education 568: Seminar in Elementary Curriculum.

Component IV: Societal Factors

Module: Education 501: The Family in Cross Cultural Perspectives.

Module: Education 505: Seminar in the Education of the Disadvantaged.

Module: Education 511: Philosophy of Education.

Module: Education 514: History of Education.

Component V: Research

Module: Education 515: Methods of Educational Research.

Module: Education 531: Elementary Statistics.

Module: Education 540: Psychological Testing.

Module Examples. The following are examples of instructional modules taken from the Jackson State College program. All of the examples here are taken from the area of reading--Module: Education 551: Recent Methods and Materials for Reading--from the Instructional Organization Component.

Number: 551-001

Context: INSTRUCTIONAL ORGANIZATION

Major Subject Area: Reading

Topics: Nature of Reading, Essential Elements of Reading, Reading Readiness, and the Development of Reading Readiness.

Target Population: Interns and team leaders.

Behavioral Objectives: Four.

1. The student will write a description of the nature of reading which reflects the role of the following factors in the reading process:
 - a. What happens in reading?
 - b. Symbolic behavior.

- c. Eye movement.
 - d. Visual shapes, sounds, and meanings.
2. The student will develop a description of the elements essential to growth in reading which includes the following facets:
- a. Physical health.
 - b. Mental health.
 - c. Sight and hearing.
 - d. Intelligence.
 - e. Background experiences.
 - f. Knowledge of language.
 - g. Interest in reading.
 - h. Reading skills.
3. The student will demonstrate a knowledge of reading readiness which takes into account the role played by each of the following:
- a. Mental age.
 - (1) Standardized tests of mental ability.
 - (2) Subjective data on mental ability.
 - b. Physical fitness.
 - (1) Vision.
 - (2) Hearing.
 - c. Social and emotional development.
 - d. Educational factors.
 - (1) Reading readiness tests.
 - (2) Informal evaluation.
 - e. General guidelines.
4. The student will display an understanding of the development of readiness for reading by giving the importance of each of the following aspects:
- a. Emotional and social security.
 - b. Educational readiness.
 - (1) Enriching experiences.
 - (2) Stimulating growth in language abilities.
 - (3) Developing speech.
 - (4) Improving listening.
 - (5) Improving the speaking and understanding vocabulary.
 - (6) Developing a reading vocabulary.
 - (7) Learning to write.
 - (8) Developing auditory and visual discrimination.
 - (9) Improving the ability to remember.
 - (10) Stimulating growth in critical thinking.
 - (11) Increasing skill in handling books.
 - (12) Orienting to left-to-right and top-to-bottom sequence.
 - (13) Developing and maintaining interest in reading.
 - (14) Using the experience chart (prereading).

Treatment: Assigned readings, discussion, lecture,

Materials: Almy, Millie C., Children's Experiences Prior to First Grade and Success in Beginning Reading.
Betts, Emmett A., Foundations of Reading Instruction.
DeBoer, John J. and Martha Dallman, The Teaching of Reading.
Harris, Albert J. Effective Teaching of Reading.
Russell, David H. Children Learn to Read.
Smith, Henry P. and Emerald V. Dechant, Psychology in Teaching Reading.

Evaluation: A pencil and paper test will be administered to determine the student's mastery of the objectives.

Number: 551-002

Context: INSTRUCTIONAL ORGANIZATION

Major Subject Area: Reading

Topic: Word Recognition.

Target Population: Interns and team leaders.

Behavioral Objectives: Two.

1. The student will give, in written form, five major skills which are necessary for the development of independence in word recognition and fully explain the role played by each skill.
2. The student will be able to give specific suggestions for classroom practices in the following phases of the development of skill in word recognition:
 - a. Teaching words as sight words.
 - b. Developing word recognition through context clues.
 - c. Developing word recognition through phonic analysis.
 - d. Developing word recognition through structural analysis.
 - e. Picture dictionaries.
 - f. Workbooks as an aid to word recognition.
 - g. Games and word recognition.

Treatment: Readings, class discussion.

Materials: Betts, Emmett A., Foundations of Reading Instruction.
Bond, Guy L., and Eva Bond Wagner, Teaching the Child to Read.
DeBoer, John and Martha Dallman, The Teaching of Reading.

Gates, Arthur I. "Vocabulary Control in Basal Reading Material," The Reading Teacher, 14:80-85.
Gray, William S., On Their Own in Reading.
Monroe, Growing Into Reading.
Russell, David H., Handbook of Research on Reading.
Smith, Henry P., and Emerald W. Dechant, Psychology of Teaching Reading.

Evaluation: A paper and pencil test will be given to demonstrate the student's mastery of the objectives.

Number: 551-003

Context: INSTRUCTIONAL ORGANIZATION

Major Subject Area: Reading.

Topic: Comprehension.

Target Population: Interns and team leaders.

Behavioral Objectives: Three.

1. The student will display a knowledge of the following factors of comprehension:
 - a. Interrelations of comprehension skills.
 - b. Causes of difficulties in comprehension.
 - c. Comprehension skills.
 - d. Problems of comprehension in the content subject.
 - e. General procedures.
2. The student will give ways to use each of the following methods for aiding in the development of comprehension in reading.
 - a. Finding the main idea.
 - b. Reading to answer questions.
 - c. Making summaries and organizing material.
 - d. Arriving at generalizations and coming to conclusions.
 - e. Following directions.
 - f. Predicting outcomes.
 - g. Evaluating what is read.
 - h. Reading graphical material.
 - i. Getting the meaning of phrases.
 - j. Comprehending sentences.
 - k. Comprehending paragraphs.
3. The student will give steps which might be used in the development of comprehension skills through a second grade reading lesson.

Treatment: Assigned readings and discussion.

Materials: Bond, Guy L., and Miles A. Tinker, Reading Difficulties, Their Diagnosis and Correction.
DeBoer, John J., and Martha Dallman, The Teaching of Reading.
Durrell, Donald D., Improving Reading Instruction.
Russell, David H., Children Learn to Read.
Smith, Henry P. and Emerald V. Dechant, Psychology in Teaching Reading.

Evaluation: A pencil and paper test will be used to determine the student's mastery of the objectives.

Number: 551-004

Context: INSTRUCTIONAL ORGANIZATION

Major Subject Area: Reading.

Topics: Reading Tests Used in Target Schools.

Target Population: Interns and team leaders.

Behavioral Objectives: Three.

The student will, through oral discussion, demonstrate a knowledge of the reading sections of the Metropolitan Reading Achievement Test (which is used in the target schools) as to the following:

1. How the reading test is administered.
2. Interpretation of test scores for evaluation of students.
3. How this evaluation can be used to help place the child.

Treatment: Team leaders will work with interns on the field in order to familiarize them with the reading sections of the Metropolitan Test. The interns will form a committee for each grade level. Each intern will participate in one committee presentation.

Materials: Metropolitan Reading Achievement Tests and accompanying manual and directions.

Number: 551-005

Context: INSTRUCTIONAL ORGANIZATION

Major Subject Area: Reading

Topic: Development and Correct Use of an Informal Reading Inventory.

Target Population: Interns and team leaders.

Behavioral Objectives: Three.

1. The student will be able to administer the informal reading inventory and evaluate the results.
2. The student will construct an informal reading inventory using reading materials found in the target schools. The inventory will follow the form of the W. S. Gray Inventory which is given as an example.
3. The student will administer the informal reading inventory which he has developed to five children in the target schools and evaluate the results.

Treatment: The student will read two handouts: Informal Reading Inventory Procedure and Informal Reading Inventory. Individual counseling sessions will be held with the team leaders in charge.

Evaluation: Team leaders will evaluate the student's performance in the field. The student's informal reading inventory will be evaluated by the team leader and the instructor. The seventh week of the quarter will be utilized for this purpose and those in the following specifications. The field work will be performed in lieu of attending class on the campus.

Number: 551-006

Context: INSTRUCTIONAL ORGANIZATION

Major Subject Area: Reading.

Topics: Operation of the Hoffman Reading Machine and Its Use with Children in Target Schools.

Target Population: Interns and team leaders.

Behavioral Objectives: Two.

1. The student will operate correctly the Hoffman Reading Machine.
2. The student will use the Hoffman Reading Machine with those students previously tested by the informal reading inventory. The material used will be selected for each individual on the basis of the results of the test and other data which are available.
3. The student will write a brief report of the activity mentioned above. This report will include: the results of the informal reading inventory for each student, the material used with the Hoffman Reading Machine, and why the material was chosen.

Treatment: Demonstration and individual counseling by the instructor and team leaders.

Materials: The Hoffman Reading Machine, the accompanying manual, results of informal reading inventory and other data concerning the students in the target schools.

Evaluation: The student's operation of the Hoffman Reading Machine will be evaluated by his team leader. The student's report will be evaluated by the instructor and team leader. This activity will take place during the seventh week of the quarter.

Number: 551-007

Context: INSTRUCTIONAL ORGANIZATION

Major Subject Area: Reading.

Topics: Operation of the Language Master and the Construction and Use of Aids with the Machine.

Target Population: Interns and team leaders.

Behavioral Objectives: Three.

1. The student will operate correctly the Language Master.
2. The student will develop materials to use on the Language Master. These materials are to be developed for a specific purpose with the supervision of a team leader.
3. The student will use the materials developed with children in the target schools.

Treatment: Demonstration, discussion, and individual counseling of interns by team leaders and instructor.

Materials: Language Master, blank cards for Language Master, curricular materials needed by individual students.

Evaluation: Interns will be evaluated on their work in the field by the team leader who is supervising them.

Number: 551-008

Context: INSTRUCTIONAL ORGANIZATION

Major Subject Area: Reading.

Topic: Oral and Written Report.

Target Population: Interns and team leader.

Behavioral Objectives: One.

Each student will develop a topic as a combination oral and written report.

The student will glean material from the relevant resource materials in the library, including information from educational periodicals. The written report will follow acceptable guidelines for writing. The paper will be due at the beginning of the eighth week of the quarter.

The oral presentation will show creativity, will be of interest to the class, and will be presented in conjunction with appropriate audio-visual materials. It will be at least thirty minutes in length. Suggested materials include the use of charts, graphs, opaque materials, overhead transparencies, posters, slides, mimeograph materials, video tape records, and any other materials that the student feels will help him communicate his ideas to the class. The oral reports must be given on the time assigned, beginning at the first class meeting of the eighth week of the quarter:

Reading Rates
Oral Reading
Gifted Readers
Meeting the Needs of the
Child of : Minority Groups,
Migratory Workers, and
Culturally Deprived
Initial Teaching Alphabet
Children's Literature
Bulletin Boards, Flannel Boards,
and Chalkboard

Informational Reading
Remedial Reading
Children's Reading Interests
Reading Through Experience
Charts
Types and Methods of Grouping
Basal Text Approach
Individualized Approach
Words in Color
Working with the Handicapped

Tachistoscope, the Skimmer
and others
Practices for Fourth, Fifth
and Sixth Grades
Corrective Reading
Specific Reading Difficulties
Use of Contextual Clues

Films, Filmstrips, and
Pictures
Grading in Reading
Practices for Kindergarten
Practices for First Grade
Practices for Second and
Third Grades
Developmental Reading

Treatment: Individual planning with the student.

Materials: The materials will vary according to individual choice
and need.

Evaluation: The student will be evaluated as to certain criteria.
The student will be made aware of the criteria prior
to presenting his report.

Oakland University

The following was developed by George F. Feeman, Professor of
Mathematics at Oakland University for the Teacher Corps program at
Oakland University. The portion presented here is Unit II: Classification
and Sets taken from An Overview of the Mathematics Curriculum from Grade K
Through 7.

Unit II: Classification and Sets

Objectives:

The goals for this unit are to:

1. Investigate objects and classify them according to a
special property such as color or size.
2. Classify objects by the inclusion relation. For example,
the population of the world includes the population of
the United States which includes the population of
Michigan, etc.
3. Order a set of objects by comparison--for example, by size
from largest to smallest.
4. Describe a set of objects by listing its members or by
recognizing a common property possessed by its members.
5. Determine when there is a one-to-one correspondence
between two sets and when this is not the case.

6. Find the intersection and the union of two sets and relate these ideas to the words "and" and "or," respectively.
7. List the members of two given sets in ordered pairs to form a new set called the Cartesian product of the two sets.

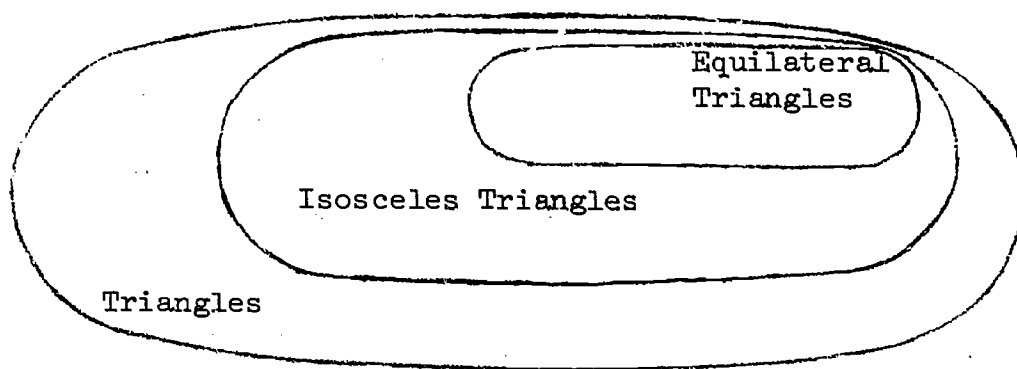
In general, this unit is concerned with prenumber ideas, which in addition to their significance in mathematics, are vital to the child's growth in awareness of his physical environment and to the development of his ability to think logically. The ideas mentioned in the first five objectives are normally studied in Grades K and 1 with an informal approach which uses concrete objects. The operations on sets in the last two objectives are forerunners of the arithmetic operations and are studied prior to work on those. For example, the union of two sets leads to addition, while the Cartesian product is used to define multiplication. The logical connections, which are made informally, emphasize important ties between mathematics and language.

Background: (See C. F. Brumfield and E. F. Kranse, Elementary Mathematics for Teachers, Addison-Wesley, 1969. Chapters 1 and 2.)

In the study of almost any subject area, a classification of things in that area becomes a crucial notion. This involves the ability to recognize an object and place it in a specific class or category according to some property it possesses. In reading, children quickly distinguish between poems and stories and soon learn to make other classifications within those categories. In music, songs of different types are easily characterized--folk songs, nonsense songs, lullabies, and so on. In mathematics, the ability to classify and to sort is not only crucial to a real understanding of numbers and operations on numbers but has long range consequences since many theorems in mathematics deal with classification and hold for certain classes of objects. For example, every rectangle has four square corners, the sum of the angles of any triangle is two right angles, every square is a rectangle, every rectangle is a quadrilateral, and so on. Thus the significance of this step in the mental development of the child cannot be overstated.

The ability to classify an object correctly involves the ability to recognize when an object has a certain property, whether it be color, size, or whatever. To put it another way if an object has a certain characteristic, then it belongs to a certain class. Objects in that class are related to each other because they possess this common property. There is no end to classification problems that are of interest to children--things they like, things they don't like, things that are heavy, things that are big, things that have wings, things that live in water, things that bite, and so on.

Inherent in the notion of classification is the idea of a subclass; that is, within a particular class of objects one can make further classifications by choosing other properties. To use a mathematical example, every equilateral triangle is an isosceles triangle which in turn, of course, is a triangle; diagrammatically, we have the following picture.



Thus the subclassification yields an inclusion, also shown clearly in the diagram. Example of inclusion relations in the experience of the child, such as family relations and relations involving athletic teams, are in abundant supply. This concept again is very important to a real understanding of number ideas and operations.

Mathematics should not be taught in isolation from other subjects. In particular, mathematics and language can and should be intertwined as much as possible. To classify a set of objects automatically involves making comparisons and this in turn implies use of words of comparison. Not only does the process of comparison then lead to the idea of ordering objects within a class, but it later on serves to introduce the concept of inequality.

With the use of objects such as sticks, stones, leaves, books, etc., words of comparison based on big, small, near, long, etc., can easily be introduced. The next step to an ordering by comparison is then an easy one. If, for example, objects are considered by length, the child should be able to order them from shortest to longest, or vice versa. Inequalities arise naturally in this process as soon as two objects are not of the same size. The mathematical concept of the transitive law flows easily from this since if object A is longer than object B, and if object B is longer than object C, then object A is longer than object C. An easy example in which this does not hold true is the relation "is the father of." If A is the father of B and B is the father of C, then A is not the father of C. Thus important mathematical concepts of long range consequence can be introduced even at this prenumber stage.

The word set is used in mathematics for any collection of objects. Since the process of classification involves working with collections of objects, the concept of a set is already a part of the child's experience. Only the consistent use of the word itself may be new to him. The things in a set are called its members or elements. These new words should be taught by giving the child many experiences with collections of objects. In general, there are two ways in which a set can be described--either by a listing of its members one by one or by a common property possessed by its members. For example, the pupils in Grade 1 can be described by the collective property of being in Grade 1 or they can be listed by name. Thus the total experience to this point allows children to recognize and describe sets of objects.

Just as objects within a set frequently can be compared, so can two sets of objects be compared in size without counting. For example in a classroom in which children are seated, by matching each child with a desk, we can see whether there are just as many desks as children. This process of matching leads to the concept of one-to-one correspondence, the basic principle of which involves matching a member of one set with exactly one member of the other set and vice versa. If this one-to-one matching works out exactly so that no members of either set are left unmatched, then the sets have the same number of members and are said to be equivalent. Otherwise, one set has at least one member left unmatched and thus has more members than the other. This matching does not involve the ability to count, but allows the concept of number to be brought into the development. Many examples of matching exercises can be found in the classroom itself--children and desks, children and books, children and pencils, and so on.

Two points should be emphasized. First, if there is a one-to-one matching between sets A and B, and a one-to-one matching between sets B and C, then there is a one-to-one matching between sets A and C. That is, the concept of equivalence obeys the transitive law. Second, there is usually more than one way in which to match the members of two sets which are equivalent. For example, the sets A, B, C, and $\{\Delta, O, \square\}$ can be matched one-to-one in six ways, as follows:

$$1. A \leftrightarrow \Delta$$

$$B \leftrightarrow O$$

$$C \leftrightarrow \square$$

$$2. A \leftrightarrow O$$

$$B \leftrightarrow \Delta$$

$$C \leftrightarrow \square$$

$$3. A \leftrightarrow O$$

$$B \leftrightarrow \square$$

$$C \leftrightarrow \Delta$$

$$4. A \leftrightarrow \Delta$$

$$B \leftrightarrow \square$$

$$C \leftrightarrow O$$

$$5. A \leftrightarrow \square$$

$$B \leftrightarrow O$$

$$C \leftrightarrow \Delta$$

$$6. A \leftrightarrow \square$$

$$B \leftrightarrow \Delta$$

$$C \leftrightarrow O$$

The children can be lead to discover this on their own. It can serve to emphasize the fact that in mathematics class, frequently more than one correct answer is possible. A true understanding of the concept of equivalence involves realizing this fact.

The empty set, denoted by \emptyset , is the set which has no members. The concept is needed both for the introduction of the number zero and for the beginning ideas in addition of numbers. It is usually easy and fun for children to concoct examples of the empty set, such as the set of people who are twenty feet tall.

Operations on sets serve two purposes--to introduce operations on numbers and to introduce logical connectives. Three operations are important. They are defined as follows:

1. Intersection: The intersection of two sets A and B, denoted by $A \cap B$, is the set of members which are in A and in B.

Thus if set A is characterized by a certain property and if B is characterized by another property, members of the intersection possess both properties. One need only think of the intersection of two streets to find a common example of this term. The connective "and" is the key word. For example, if one set consists of all brown animals and the other of all horses, then the intersection is the set of animals which are both brown in color and horses; that is, brown horses.

2. Union: The union of two sets A and B, denoted by $A \cup B$, is the set of members which are in A or in B (or in both).

Thus if A is characterized by a certain property and if B is characterized by another property, members of the union possess at least one of the two properties. The connective "or" is the key word. In the example above of the brown animals and the horses, an animal is in the union of the two sets if it is brown or a horse (or a brown horse).

The difficulty that arises with the concept of union of two sets is that the "or" is inclusive, as the "and/or" of the English language. Thus for elementary school children it is simplest to start with two sets which have no elements in common; that is, whose intersection is the empty set. In this case the union is obtained by simply adjoining one set to the other, and an object is in the union if it is either in one or the other. The "or" is then the exclusive "either/or" relation of the English language. An easy example illustrates this idea: The United States is the union of fifty states. Since no two of these states overlap, the intersection of their land areas is empty. The total land area of the United States is then the sum total of the land areas of the fifty states.

3. Cartesian product: The Cartesian product of two sets A and B, denoted by $A \times B$, is the set of all ordered pairs (a,b) where a is a member of set A and b is a member of set B.

Thus if A is characterized by a certain property and if B is characterized by another property, then the product consists of all pairs whose first entry has the property of A and whose second entry has the property of B. For example, suppose a child has three dolls and two outfits, any one of which fits any of the dolls. Then the product of the set of dolls with the set of outfits can be shown as follows:

	Doll #1	Doll #2	Doll #3
Outfit #1	Doll #1 wears Outfit #1	Doll #2 wears Outfit #1	Doll #3 wears Outfit #1
Outfit #2	Doll #1 wears Outfit #2	Doll #2 wears Outfit #2	Doll #3 wears Outfit #2

Therefore six pairings are possible. Clearly this marks the Cartesian product as the forerunner of multiplication. It also has longer range consequences beyond the elementary school.

This concludes the background section. These ideas will be explored in terms of classroom activities and problems in the next section.

Classroom Activities:

As has been mentioned frequently in Unit I and in the background section of this unit, a true child-centered program involves much use of concrete objects chosen as often as possible from the physical environment of the children and by the children themselves. In all of the prenumber work on classification and sets the children are exploring the world in which they live and are learning to work with objects they see in it. Gradually objects from mathematics such as geometric figures can be introduced and classified, until ultimately numbers and other symbols from the abstract world are seen as representations of these concrete objects.

Classroom activities for classification, comparison, and description of sets should be built around sets of objects which are familiar to the children. The teacher will then be taking into account the stages of learning discussed in Unit I.

One specific item should be mentioned. Z. P. Dienes has used attribute blocks to provide games in classification and logical relations. These are models which involve four characteristics or attributes--size, color, thickness, and shape. Children play with these blocks and sort them in terms of specific attributes. One game involves a child picking out a block of a certain character.

The next child must pick another block which differs from the first in exactly one respect. For example, if the first child picks a small, thin, blue block, the next child might pick a large, thin, blue block. If a child errs, the next child tries to correct him, and the game proceeds in this fashion. These blocks can also be used to play games involving the set operations of intersection and union.

Since the children are actually handling concrete objects, the teacher may have difficulty with the concept of the empty set. This can be overcome by appealing to the fantasy world which children love. It should be fun to

create many examples of this idea, such as the set of men with five hands, the set of green horses, and so on.

Activities to show one-to-one matchings between sets should begin with familiar accessible objects such as the children, their desks, their pencils, their pads, their books, and so on. The teacher should ask the children to identify sets they see in the room, and let them work with these. Transition then can be made to using sets drawn on the chalk board. To deepen the child's understanding of this matching process, the teacher should emphasize the multiple ways in which matchings can be made for a specific pair of sets. Importance should also be placed on the fact that it is not always possible to match two sets in a one-to-one fashion, in which case the terms "more than" and "less than" must be introduced.

Piaget makes an interesting point. If a child is given the following sets of X's and O's

```
  X  X  X  X
  O  O  O  O
```

placed as shown he easily matches the X's with the O's in a one-to-one fashion. (In how many ways can this be done?) Thus there are just as many X's as O's. However, if the sets are arranged like this

```
      X  X  X  X
    O      O      O      O
```

or like this

```
  O
    O  X
      O  X X X
    O
```

or in some other irregular order, the child may have difficulty drawing the correct conclusion. In the first case he may say that there are more O's than X's because they are spread out more. In the second case he may have trouble making a matching because of the irregular patterns of the symbols, and may say there are more O's because of the greater height of the pattern. If the X's and O's are placed like this:

```
  X  XXXXX      000 000
```

he may say there are more X's because there is a bigger bunch in the set of X's.

The stage in which the child realizes that the number of members of a set does not change when those members are merely rearranged is called by Piaget the stage of conservation of quantity. The teacher should create exercises to test the children on this point. When they have reached this stage of development, then they are truly ready to consider the concept of number and of counting.

Classroom activities concerned with the operations on sets--union, intersection, and product--should also be built around sets familiar to the children. As mentioned in the background section, unions of sets with no intersection should be given priority because of the relationship of this case to the operation of addition. Subtraction can then be motivated by asking children to list the members of a set A if the sets B and $A \cap B$ are given and if A and B have empty intersection. For example, suppose B is the set of pupils {Doris, Jane} and $A \cup B$ is the set of pupils {Doris, Jane, Bill}. If A and B have no elements in common, then A must be the set in which Bill is the only member.

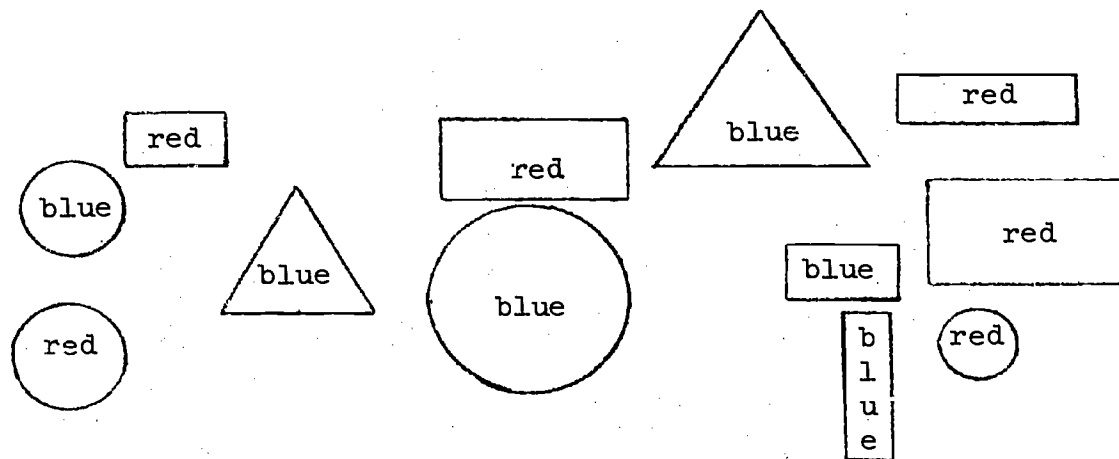
Sets used to illustrate the product will be of most interest if the pairs have some physical meaning. For example, if a child goes to an ice cream parlor and wants an ice cream cone, he may have to decide between two types of cones--regular and sugar--and four types of ice cream--vanilla, chocolate, strawberry and burnt almond. The Cartesian product of these sets would contain eight items--each kind of ice cream with each kind of cone--the number of possibilities open to the child. Surely the children's mouths will be watering by the time they finish such an example. So much so that the teacher may have to treat them all. In any case, the realism of the example adds to the fun and the excitement of developing the concept.

Diagnosing Difficulties:

For this unit the objectives are arranged in a simple hierarchy as follows:

1. Classification by common property
↓
2. Classification by inclusion
↓
3. Ordering by comparison
↓
4. Description of a set
↓
5. One-to-one matching of two sets
↓
6. Intersection of sets
↓
7. Union of sets
↓
8. Cartesian product of sets

Thus the difficulties at any stage are not hard to identify. Some of the steps are actually independent of each other. Perhaps an example of the following type would suffice to test the entire package. Consider the following set of geometric figures colored red and blue as shown.



A problem set could go as follows with the language adjusted to the level of the child.

1. List all red objects. List all blue objects.
2. The set of _____ circles is contained in the set of _____.
3. Arrange the red squares in order from smallest to largest.
4. Describe the set of triangles.
5. Is there a one-to-one matching between the set of squares and the set of circles? Between the set of non-square rectangles and the set of triangles?
6. List all red objects. List all squares. Find the intersection of these sets. Describe this intersection. Find the union of these sets.
7. List all squares. List all circles. Find the union of these sets. What is the intersection of these sets?
8. List all triangles. List all circles. Find the Cartesian product of these sets.

If a child cannot do some problems on this list, then his difficulty is isolated and more work must be done on that type of problem.

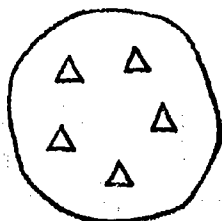
Problems for the student:

Here are some problems which are typical of those that might be used to test the comprehension of the child. The language must be adjusted to the level of the child.

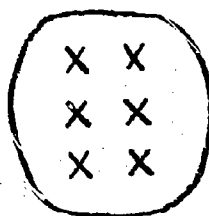
1. Make a list of objects that
 - a. you like.
 - b. y u dislike.
 - c. are heavy.
 - d. are long.
 - e. are beautiful.
 - f. will sink when placed in water.
2. Name each of the following items and order them so that each is included in the next.
 - a. your family
 - b. the city in which you live
 - c. the state in which you live
 - d. the country in which you live
 - e. the continent on which you live
3. Here is a list of five automobiles. List them by size from the smallest to the largest.

Chevy Camaro, Volkswagen, Lincoln Continental,
Dodge Dart, Chevrolet
4. Describe each set by a listing of its members.
 - a. your family
 - b. the vowels in the alphabet
 - c. the primary colors
5. Describe each set by some common property:
 - a. $\{\Delta, \square, \triangle\}$
 - b. $\{k, b, c, d, m\}$
 - c. $\{\text{Mustang, Maverick, Galaxie}\}$

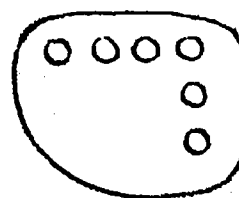
6. Here are pictures of three sets. Describe each one, then answer the following questions.



A

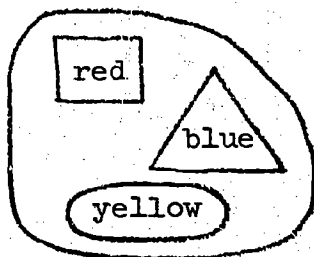


B

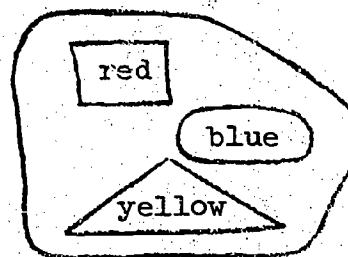


C

- a. Which has more elements, A or B?
 - b. Which has more elements, B or C?
 - c. Show a one-to-one matching between any two sets for which it is possible.
7. How would you describe the following sets:
- a. Set of boys with 6 hands
 - b. Set of girls with 4 legs
 - c. Set of cows which can fly
8. Here are two sets A and B.



A



B

- a. Find the intersection of A and B.
 - b. Find the union of A and B.
9. Let $A = \{O, \Delta, \square\}$ and $B = \{E, F, G\}$.
- a. Find the union of A and B.
 - b. Find the Cartesian product of A and B.

10. If $A = \{O, \Delta, \square\}$ and $A \cup B = \{O, \Delta, \square, \square, \square\}$ and if $A \cap B$ is empty, find the members of set B.

Problems for the teacher:

Here are some problems to test the comprehension of the teacher. Since his understanding should be deeper than that of the child, some ideas are introduced in these problems which have not been discussed in the unit.

1. Definition: A set A is a subset of a set B, written $A \subset B$, if each member of A is also a member of B.
 - a. Let $B = \{a, b, c\}$. Construct all the subsets of B. How many are there in all?
 - b. Is the empty set a subset of B?
 - c. If a set has n elements, how many subsets does it have?
 2. How do two children tell which one gets more Christmas presents?
 3. At a dance how can one determine whether there are as many boys as girls present?
 4. Let $A = \{\text{apple, orange, pear, banana}\}$ and $B = \{\text{catcher, pitcher, shortstop, outfielder}\}$. Describe each set. Is there a one-to-one matching between A and B? If so, how many such matchings are possible?
 5. Let $A = \{8, 7, 6, 5, 4\}$, $B = \{6, 5, 4, 3\}$, $C = \{6, 5, 4\}$, and $D = \{3, 4, 5, 6, 7, 8\}$. Determine whether each of the following is true or false.
 - a. $B \subset A$ _____
 - b. $C \subset B$ _____
 - c. $C = A \cup C$ _____
 - d. $B \cup C = B$ _____
 - e. $A \subset A \cup B$ _____
 - f. $D = B \cup A$ _____
- Find each of the following:
- g. $A \cap B$
 - h. $A \times B$

- i. $B \times A$ (Are $B \times A$ and $A \times B$ the same?)
 - j. $C \cap D$
 - k. $D \cup A$
 - l. $(A \cup B) \cap D$
6. Suppose $A \cap B$ is given. Can one reconstruct the sets A and B ? Demonstrate your answer with an example. If you can reconstruct the sets A and B , is there exactly one answer?
 7. Suppose $A \cup B$ is given. Can A and B be reconstructed? Is there exactly one answer?
 8. Suppose A and $A \cup B$ are given. Can B be reconstructed? Is there exactly one answer?
 9. Suppose A and $A \cup B$ are given. Can B be reconstructed? Is there exactly one answer?
 10. Suppose A and $A \cup B$ are given and suppose A and B have empty intersection. Can B be reconstructed? Is there exactly one answer?
 11. Suppose $A \times B$ is given. Can A and B be reconstructed? Is there exactly one answer?
 12. Definition: If A is a subset of B , the complement of A in B , written $\sim A$, is the set of members which are in B and not in A .
 - a. Let A be the set $\{a, e, i, o, u\}$ in the alphabet. Find and describe $\sim A$.
 - b. If A is the set of odd whole numbers, what is $\sim A$?
 - c. If A is the set of multiples of 5 in the whole numbers, what is $\sim A$?
 - d. If the set B is given and $\sim A$ is given, can the set A be reconstructed? Why? Is there exactly one answer?

San Francisco State College

The following module cluster is one selected from those developed at San Francisco State College. This particular module cluster was developed by Professor Jack R. Fraenkel; it is Cluster Number 3: The Selection of Subject Matter (Content) for Use in Social Studies Units and Courses and consists of six modules.

Module 3-1:

Objective: Given appropriate instruction and/or information, you should be able to state (orally, or in writing) at least six examples of criteria that can be used as guidelines for selecting content for inclusion in social studies courses.

Prerequisites: None.

Preassessment: See below.

Learning Activities:

- a. Read excerpt from Fraenkel.
- b. Attend class.
- c. Interview with instructor.
- d. Interview with Team Leader.
- e. Student option.

Evaluation: State (verbally or in writing) at least six examples of the criteria as described in the objectives.

Criterion of Acceptance: Okay by Team Leader.

Preassessment for Module 3-1:

1. Explain the meaning of the term "criteria" as you think it applies to the selection of social studies content.
2. Give at least six examples of criteria that you would use as a basis for selecting content for use in social studies lessons.

Module 3-2:

Objective: Given appropriate instruction and/or information, you would be able to distinguish among facts, concepts, generalizations, and thought systems, and demonstrate what these terms mean by offering examples of each.

Prerequisite: See below.

Learning Activities:

- a. Read excerpt from Fraenkel.
- b. Read Taba Handbook, Chapter 4.
- c. Read Lewenstein, pp. 82-88.
- d. Interview with Instructor.
- e. Interview with Team Leader.
- f. Attend class.
- g. Student option.

Evaluation: Give three examples of each (facts, concepts, generalizations, thought systems) verbally or in writing.

Criterion of Acceptance: Okay of Team Leader.

Preassessment for Module 3-2:

Define each of the following terms and give an example of each:

1. Fact.
2. Specific concept.
3. Abstract concept.
4. Generalization.
5. Frame of reference.
6. Rationale.
7. Thought system.

Module 3-3:

Objective: Given appropriate instruction and/or information, you should be able to differentiate examples of concepts and/or generalizations of lesser power from those having greater power.

Prerequisite: Modules 3-1 and 3-2.

Preassessment: See below.

Learning Activities:

- a. Read excerpt from Fraenkel.
- b. Attend class.
- c. Interview with Instructor.
- d. Interview with Team Leader.
- e. Student option.

Evaluation: Retake preassessment test below.

Criterion of Acceptance: Score of 90% or above on test.

Preassessment for Module 3-3:

Listed below are several pairs of concepts or generalizations. Place an X in front of the concept or generalization that is the more powerful in each pair.

1. A. ☐ urbanization
B. ☐ city
2. A. ☐ change
B. ☐ democracy
3. A. ☐ court
B. ☐ dissent
4. A. ☐ family
B. ☐ interdependence
5. A. ☐ conflict
B. ☐ dispute
6. A. ☐ Several cultures in Latin America influenced and were influenced by foreign conquerors.
B. ☐ Cultures change in varying degrees when they come in contact with another culture.
7. A. ☐ The wide variety of characteristics found among the states of the United States of America reflect the varied cultural backgrounds of the peoples who settled in them.
B. ☐ Though all cultures possess certain unique features, they are also similar in a number of ways.
8. A. ☐ Man's ways of living affect, and are affected by the physical and social environment in which he lives.
B. ☐ Certain inventions of early man revolutionized his way of life.
9. A. ☐ Societies sometimes punish those who question established values.
B. ☐ The daily activities of the ancient Greeks and Romans reflected their values.
10. A. ☐ The changes that occurred in Western Europe after the fall of Rome came about as a result of many interesting factors.
B. ☐ Pressures for change develop from many sources.
11. A. ☐ Men continually seek to improve their condition through obtaining those rights they consider essential to their welfare.
B. ☐ Many groups in the American society have continually striven to promote their own well-being as they have defined it.

Module 3-4:

Objectives: Given appropriate information and/or instruction, you should be able to a) explain what course and unit outlines are, and write possible course and unit outlines of your own that you might use at a grade level of your choosing when you teach social studies.

Prerequisite: Modules 3-1, 3-2, and 3-3.

Preassessment: See below.

Learning Activities:

- a. Read Lowenstein, Chapter IV.
- b. Read excerpts from Fraenkel.
- c. Interview with Instructor.
- d. Interview with Team Leader.
- e. Attend class.
- f. Student option.

Evaluation: Prepare in writing a course outline at a grade level of your choosing for a semester's work. Then prepare in writing a unit outline for one of the units in your course.

Criterion of Acceptance: Grade of "Pass" by the Instructor.

Preassessment for Module 3-4:

Define each of the following terms:

1. Course outline.
2. Unit outline.
3. Lesson plan.

Module 3-5:

Objective: Given appropriate instruction and/or information, you should be able to explain what a lesson plan is and write a possible lesson plan at a grade level of your own choosing that has the following characteristics:

- a. Deals with social studies content.
- b. Represents one lesson that you could use in one of the units included in your course outline (see Module 3-4).
- c. Meets at least five (5) of the criteria identified as being important to consider in selecting social studies content (see Module 3-1).
- d. Develop an idea (generalization) or concept.

Prerequisite: Modules 3-1, 3-2, 3-3, and 3-4.

Preassessment: See preassessment for Module 3-4.

Learning Activities:

- a. Attend class.
- b. Interview with Team Leader.
- c. Interview with Instructor.
- d. Student option.

Evaluation: Write a lesson plan possessing the characteristics described in the objectives.

Criterion of Acceptance: Okay by Team Leader.

Module 3-6:

Objective: Given appropriate information and/or instruction, you should be able to explain what is meant by the concept "rationale," give at least three reasons why a clearly thought out and defensible rationale is important to state when selecting social studies content, and give a rationale for any social studies content you select for instruction.

Prerequisite: Modules 3-1, 3-2, 3-3, 3-4, and 3-5.

Preassessment: See below.

Learning Activities:

- a. Read excerpt from Fraenkel.
- b. Read Stevens and Morrisett.
- c. Attend class.
- d. Interview with Instructor.
- e. Interview with Team Leader.
- f. Student option.

Evaluation: Prepare in writing a defense (that is, state the rationale behind) of the lesson plan you prepared for Module 3-5.

Criterion of Acceptance: Okay of Team Leader.

Preassessment for Module 3-6:

1. Place an "O" in front of any statements below which represent objectives and an "R" in front of any statements which represent a rationale.
 - a. _____ Exposed to two or more different samples of information, the student correctly states differences and similarities among those samples.

- b. _____ Presented with a detailed set of facts, students can state valid generalizations that they had not been given previously, and when asked, can provide the sources and limitations of the generalizations.
 - c. _____ Given a set of events (one of which is identified as the event to be explained) occurring in a social setting, the student gives a plausible and logically sound explanation of the chains of cause-and-effect relationships that resulted in the occurrence of the event.
 - d. _____ Students indicate comprehension of the meaning of a given number of ideas and concepts.
 - e. _____ Students will occasionally make comments in a discussion session that depart significantly from the rather general agreement of the class as a whole, and which are judged by the teacher to have some likelihood of leading to useful relationships or conclusions.
 - f. _____ Ability to relate one's own values to those of others is crucially important in any inquiry directed at clarification or resolution of value conflicts.
 - g. _____ When students can obtain information from maps and globes, they possess a very useful skill for learning about man's activities and environment.
 - h. _____ Being able to form hypotheses is essential for anyone who hopes to deal constructively with problems in social studies. Hypothesizing provides a focus for thinking about a problem. One's thinking is likely to be unproductive if the problem is conceived too broadly or if an attempt is made to analyze too many kinds of facts in too many ways all at the same time.
 - i. _____ Understanding the aspirations of people in a society is fundamental to understanding the nature of the society and to an analysis of its problems.
2. Which of the following statements of rationale for having students learn about the American Civil War of 1861-1865 do you think is most justifiable?
- a. The Civil War is a vital part of our American Heritage, and as such, is something that every student should learn about.
 - b. Questions about the Civil War are always asked on College Board Examinations.
 - c. Some events from the past are important to know about if one is to become an educated man. The Civil War is one of these events.

- d. Studying about the Civil War may help students to realize that honest men may legitimately differ in the goals which they consider worth attaining.

State University College at Buffalo

In the past year, numerous modules and module clusters have been developed for the Teacher Corps program at the State University College at Buffalo. The module cluster which follows is concerned with Behavioral Objectives in Math/Science.

Reference System Designation: CMM:211:00:SCB

Program: Peace Corps/Teacher Corps Program at the State University College at Buffalo, Buffalo, New York

Component: Curriculum Methods and Materials: Teaching Math/Science

Developer: Francis Siemankowski/Joyce Swartney

Date of Development: Summer 1971

CMM:211:00:SCB Behavioral Objectives in Math/Science

General Objectives of Module Cluster: The purpose of this Module Cluster is to enable students to become familiar with the terminology of behavioral objective, to be able to discern behavioral objectives from non-behavioral objectives, to be able to classify behavioral objectives according to a Taxonomy, and to write behavioral objectives in Math/Science.

Prerequisites to the Module Cluster: This Module Cluster does not require students to have any prerequisite competencies other than those which typically would be considered as program entrance requirements.

Modules Within the Module Cluster: This Module Cluster contains five Modules each of which is related to an aspect of the objectives of the Cluster; the Modules are as follows:

CMM:211:01:SCB Introduction to Behavioral Objectives.
CMM:211:02:SCB Identifying Behavioral Objectives.
CMM:211:03:SCB Classifying Behavioral Objectives.
CMM:211:04:SCB Writing Behavioral Objectives.
CMM:211:05:SCB Relating Behavioral Objectives to Curriculum.

CMM:211:01:SCB: Introduction to Behavioral Objectives

Objective: At the end of this module, the student will be able to demonstrate an understanding of the component parts of a behaviorally based objective, differentiate between behavioral and non-behavioral words, and state a rationale for the use of performance objectives.

Prerequisites: None.

Pre-Assessment: Pre-assessment procedures consist of a pencil and paper test based on the objectives; see below.

Instructional Activities (optional):

1. Read Preparing Instructional Objectives by Mager.
2. Read Behavioral Objectives and Instruction, Chapter 1 by Kibler.
3. Read "Probing the Validity of Arguments Against Behavioral Goals" by Popham pp. 115-124 in Behavioral Objectives and Instruction.
4. Alternate Activity: Listen to tape and view overhead transparencies, "Why Behavioral Objectives" by Albert Eiss.
5. Attend seminar which will deal with Behavioral Objectives.

Post-Assessment: Post-assessment will consist of an alternate form of the Pre-Test. Minimum criteria for successful completion of this Module is 90%. The Student may take the test at his pleasure by making arrangements with the Instructor.

Remediation: Consult with the Instructor. Listen to tape and view overhead transparencies of "Why Behavioral Objectives" by Albert E. Eiss.

Pre-test for Module CMM:211:01:SCB

Identify the statements below with an X which describe a learning task in behavioral terms.

- ☐ 1. At the end of the session, the student is aware of the biological problems which man may encounter in space travel.
- ☐ 2. At the end of the session, the student can identify variables in an activity in which water moves over materials.
- ☐ 3. At the end of the session, the student can construct a record of observed changes in properties.
- ☐ 4. At the end of the session, the student understands the basic principles related to heat and light.

- _____ 5. At the end of the session, the student can make measurements in both the metric and English systems.
- _____ 6. At the end of the session, the student knows the eight fundamental processes necessary to sustain life.

In the space provided, please identify the following words as (O) open to many interpretations--non-behavioral--or (C) closed to many interpretations--behavioral.

- | | |
|---------------------|---------------------|
| 1. _____ Write | 6. _____ Believe |
| 2. _____ Know | 7. _____ Compare |
| 3. _____ Recite | 8. _____ Appreciate |
| 4. _____ Solve | 9. _____ Identify |
| 5. _____ Understand | 10. _____ To group |

List three or more reasons to support the use of performance objectives.

CMM:211:02:SCB: Identifying Behavioral Objectives

Objective: Given a list of objectives the student will be able to discern between behavioral and non-behavioral objectives and will be able to change the non-behavioral objectives to behavioral objectives; the criterion level is 90%.

Prerequisites: Successful completion of Module CMM:211:01:SCB.

Pre-Assessment: A paper and pencil test in which the student will be asked to distinguish between behavioral and non-behavioral objectives and change the appropriate one; see below.

Instructional Activities (optional):

1. Read Chapter 2 in Kibler, Behavioral Objectives and Instruction.
2. Read "Defining Objectives" in Inquiry Techniques for Teaching Science by Romey.
3. View and listen to "Educational Objectives" and "Systematic Instructional Decision-Making," film strip tape programs produced by Vimcet Associates.
4. Attend seminar which will deal with the topic of behavioral objectives.

Post-Assessment: Post-assessment will consist of an alternate form of the Pre-Test. Minimum criteria for successful completion of this Module is 90%. The Student may take the test at his pleasure by making arrangements with the Instructor.

Pre-test for Module CMM:211:02:SCB

In the space provided, please mark the following objectives as (B) behavioral or (N) non-behavioral.

1. _____ Outside of class the students will write a five-page essay on the rise and fall of the Roman Empire from a sociological viewpoint. They will use the appropriate footnotes and bibliography.
2. _____ The students will learn the preamble of the United States Constitution.
3. _____ Given the dimensions, the students will be able to compute the area of a square, triangle, and circle.
4. _____ The students will learn to ski.
5. _____ During this term the students will demonstrate their appreciation of classical music by attending at least three of the seven concerts held at Small Hall.
6. _____ The students will be able to throw a football at least 21 feet.
7. _____ The students will demonstrate their knowledge of the first seven Presidents of the United States.
8. _____ The students will type, error free, on a standard electric typewriter a fifty-word paragraph in two minutes.
9. _____ The students will demonstrate their competency on the three string banjo.
10. _____ The students will demonstrate an appreciation for modern art.

On the reverse side of this paper, please rewrite the non-behavioral objectives in such a way as to make them behavioral.

CMM:211:03:SCB Classifying Behavioral Objectives

Objective: Given a list of behavioral objectives, the student will be able to classify them according to a taxonomic system; 90% accuracy will serve as the criterion level.

Prerequisites: Successful completion of Modules CMM:211:01:SCB and CMM:211:02:SCB.

Pre-Assessment: Pre-assessment procedures consist of a pencil and paper test based on the objectives; see below.

Instructional Activities (optional):

1. Read Chapter 3 in Behavioral Objectives and Instruction by Kibler.
2. View and listen to "Selecting Appropriate Educational Objectives" and "Establishing Performance Standards," filmstrip-audio tape programs by VIMCET.
3. Attend seminar which focuses on the taxonomic system.
4. Read "Behavioral Objectives in the Affective Domain" published by National Science Supervisors Association.
5. Given a list of performance terms the students will arrange them in the three categories: Cognitive, Affective, and Psychomotor. (Work sheets are available in ISC. Answer sheets available on Bulletin board.)

Post-Assessment: Post-assessment will consist of an alternate form of the Pre-Test. Minimum criteria for successful completion of this Module is 90%. The Student may take the test at his pleasure by making arrangements with the Instructor.

Remediation: Re-cycling by arrangement with Instructor.

Pre-test for Module CMM:211:03:SCB

In the space provided, please label the following objectives as being (C) cognitive, (A) affective, or (P) psychomotor.

1. _____ The students will demonstrate their appreciation for classical music by attending at least four of eight concerts at Small Hall.
2. _____ The students will be able to label by name the pictures of the last seven presidents of Yugoslavia.
3. _____ In class the students will be able to write a three-page essay on the dangers of water pollution via Iron Sulfate, as advocated by the American Dental Society, without the use of outside material, in a period of 30 minutes.
4. _____ The students will demonstrate their ability to throw a softball with accuracy by throwing a standard 12 inch softball through an automobile time (7/75:15) suspended three feet from the ground at a distance of 32 feet (7 of 10 is passing).

5. _____ At the end of a unit on Indians, the class will demonstrate their concern for Indians by sending (voluntarily) at least \$5.00 to the Cleveland Indians for relief. (The method used to raise the money is immaterial.)
6. _____ The students will be able to solve 4 out of 5 linear equations in class, without the aid of outside material, in one hour.
7. _____ The class will demonstrate their acceptance of the rule "quiet while others speak" by not talking during any of the two minute speeches given by the 15 members of the class.
8. _____ The class will demonstrate their appreciation for fairy tales by checking out of the library at least two fairy tales following the completion of the fairy-tale unit.
9. _____ The students will demonstrate their understanding of Paradise Lost by answering correctly at least 45 of 50 true-false questions on the content of the novel.
10. _____ The class will demonstrate their ability in the use of the Australian Crawl, by crawling at least 100 yards in a period of 2 minutes.

CMM:211:04:SCB: Writing Behavioral Objectives in Math/Science

Objective: Given a subject within the student's area of curricular competency, the student will be able to write at least three behavioral objectives in each of the taxonomic domains.

Prerequisites: CMM:211:01:SCB, CMM:211:02:SCB, and CMM:211:03:SCB.

Pre-Assessment: None.

Instructional Activities (optional):

1. Read and complete the activity "Performance Objectives" by Anderson.
2. Read Chapter 4 and complete activities in Behavioral Objectives and Instruction by Kibler.
3. Write ten behavioral objectives for a unit or units in an eighth or ninth grade general science class. Be prepared to defend them orally. Attend a seminar based on behavioral objectives.
4. Review any or all of the VIMCET materials used in the previous two modules.

Evaluation: The evaluation will consist of the student writing three behavioral objectives in each of the applicable taxonomic domains (cognitive, affective, and psychomotor) in a Math/Science area of his choice; these will be assessed according to guidelines found in Mager, Kibler, and Anderson.

CMM:211:05:SCB: Relating Behavioral Objectives to the Curriculum

Objective: Upon completion of this module the student will be able to orally present arguments relating to the role of behavioral objectives in planning.

Prerequisites: None.

Pre-Assessment: None.

Instructional Activities (optional):

1. Read Behavioral Objectives and Instruction by Kibler, pp. 23-24.
2. Read "Probing the Validity of Arguments Against Behavioral Goals" by W. James Popham on p. 115 in Behavioral Objectives and Instruction by Kibler.
3. Read "Behavioral Objectives: A Close Look" by Robert L. Ebel in Phi Delta Kappan, November 1970, p. 171.
4. Read "Behavioral Objectives in Curriculum Design: A Cautionary Note" by Myron Atkin in The Science Teacher, May 1968, pp. 27-30.
5. Locate and read at least two additional articles, one for and one against, the use of behavioral objectives.
6. Read "Behavioral Objectives" by Earl J. Montague and David P. Butts in The Science Teacher, March 1968, pp. 33-35.
7. Read "Reply to Atkin on Behavioral Objectives" in The Science Teacher, pp. 12 and 14.
8. Read "Behavioral Objectives and Instructional Design: An Elaboration" in The Science Teacher, March 1969, pp. 10, 77-78.
9. Read "Behavioral Objectives: Continuing the Dialogue" by Hendrik D. Gideonse in The Science Teacher, January 1969, pp. 51-54.
10. Read "Behavioral Objectives: Key to Planning" by Bill D. Engman in The Science Teacher, October 1968, pp. 86-87.

Evaluation: The student will participate in a seminar discussion and/or private discussion with the instructor based upon the objective above.

Texas Southern University

The following section contains two types of information: (1) a copy of a memorandum from the director of the Texas Southern University Teacher Corps program to all interns, and (2) copies of the modules to which he referred in that memorandum.

Memorandum from Program Director. The following is a memorandum written by Professor J. O. Perry, director of the program, and addressed to all interns.

Things are really beginning to happen. Modules are being developed and tested by various intern teachers in our program. Some really good stuff is beginning to evolve.

In this packet are modules in science, math, and language arts. At this point, the modules are somewhat unpolished. The assumption is that after a module is developed and tested by the intern-teacher himself, it will be further tested by other intern-teachers and cooperating-teachers. Each testing should offer new reactions and suggestions for refining the module. So the final product will evolve over a period of time.

Apparently, some modules are being developed that we have not seen. We like for those to be shared with the group as well. Ideally, what will happen is that we can get enough sharing of modules going so that we eventually develop a module bank, consisting of modules in all the subject matter areas in which you now teach.

You have shown the potential for developing high quality curriculum materials set up in modular form. Please Don't Stop Now!

Module examples. The following are the eight modules to which Dr. Perry referred in the preceding memorandum. While a number of modules were developed by faculty for use with interns, the examples selected to be presented here were developed by interns. This decision was prompted by the feeling that these might better represent the nature of impact which was made by the notions of modular instruction. The modules were developed by: (1) Bobbie E. Ammons, (2) Freddie Bullock, (3) Becky Freeman, (4) Elisha Hall, (5) Lourene Johnson, (6) Leslie Lopez, (7) Enrique Medrano, and (8) Waynel Sexton.

Module I

Objective: The student will demonstrate his knowledge of the Dolch Basic Sight Words (lines 15-17) by writing at least eight out of twelve during class without the use of his word list.

Prerequisite: Students ability to recognize and spell the words in lines 1-14 of the Dolch word list.

Pre-Test: Child's ability to read words from list. (Lines 1-17.)

Remediation:

1. Each student will read word list (lines 1-14) and make simple sentences of some of the words.
2. In the event some words are action words, they will demonstrate the action.
3. Have a spelling bee on lines 1-14.

Instructional Activities:

1. Pronounce words and spell them aloud, in a group.
2. Each child will pronounce words individually.
3. As a group game, we will make sentences on the black-board using the Dolch words in lines 15-17.
4. Ask various students to spell certain words from the list and use the word in a sentence.

Post-Test: Student will write words as they are called to them by the teacher.

Remediation: Make a cross-word puzzle of the words and let child solve puzzle independently.

Module II

Objective: The students will demonstrate their knowledge of capital letters, sentence structure, and relate orally some of their observations or experiences.

Prerequisite:

1. Knowledge of simple sentences.
2. Knowledge of punctuation.
3. Ability to write some form of simple sentences.

Pre-Test:

1. Look at picture and write three sentences about things seen in the picture.
2. Use punctuation marks where they are needed in these sentences.
3. Use capital letters where they are needed in sentence structures.

Remediation: (If needed) Teach student rules for capital letters.
Write sentences related to observation and experiences (field trips).

Instructional Activities: Use pictorial cards of animals, landscapes, activities of birds or animals, for example: landscape containing snow, birds in activities, animal grazing, lake of water with boat riding, and picnicking. The student will observe pictures like these and write three to five sentences after oral discussion about things they see in pictures.

Post-Test: Post-test may be done orally or as a written exercise on the chalkboard or with use of mimeographed sheets.

Remediation: Reteach beginning with capitalization and writing of simple sentences.

Module III

Objective: Student will demonstrate his ability to recognize written words by verbally identifying fifteen words out of twenty correctly.

Prerequisite: Knowledge of alphabets and beginning sounds.

Pre-Test: Identify words; let child post flash card into pocket chart and identify word to teacher.

Test Words

With	Who	Policemen	Can	Can't
Ride	And	The	Mike	Mary
Jeff	(Red, Yellow, Blue, Green, and Color Words)			

Remediation:

Orally:

1. Let a child (a proficient one) quiz another on all 26 alphabets.

2. Pass-out (individually) pictures with alternative P sounds, W sounds, etc., with other beginning sound pictures they are not familiar with.
Directions: Circle pictures with all beginning P sounds, W sounds, etc.
3. Give magazines to children and make a W chart (or any). Find W sounds pictures and cut out and paste.
4. Cut a square of newspaper print, instruct them to circle all W's found in newspaper.

Instructional Activities:

1. All activities included in remediation plus the following.
2. For individual seat work: Give child three or more different alphabet sound. (At all times a child who is proficient can assist the other child.)
3. Let children demonstrate the word they are learning: Example, Ride - Through - - Play - Acting, and have children guess what is being performed in relation to given word.
4. In Tablet: Let child print word in tablet (which will enable him to recognize alphabets which makes up the world).
5. Teacher will write on blackboard (providing child knows all words used in sentence). Example: Mike and Jeff ride--then draw and color a picture of Mike and Jeff.

Post-Test: Verbally identify fifteen words out of twenty words correctly.

Remediation:

1. Teach the song ABC.
2. Teach sound of alphabets through animal sounds, city sounds, etc.
3. Draw a picture to accompany particular alphabet sound.
4. As ABC song is sung, place ABC's cards on floor, let them step on letters.

Module IV

Objective: Students will demonstrate their knowledge of electricity by being able to classify 18 out of 20 objects as being either conductors or insulators of electricity without any outside help.

Prerequisite: Students must know what conductors and insulators are in relation to electricity.

Remediation:

1. Show a filmstrip explaining conductors and insulators.
2. Use dictionaries to define these two terms.

Pre-Test: Entering behavior is assessed by verbal discussion of what conductors do and how insulators effect the flow of electricity.

Instructional Activities:

1. Read section in textbook and outside materials of conductors and insulators.
2. Perform experiments on electricity testing different materials in classroom to see if they are conductors or insulators of electricity.

- a. If the light lights up after some type of material (pencil, paper, copper wire, jewelry and what else the student would like to try) has been connected at points A and B that material is classified as a conductor.
- b. If the light does not come on after following the same procedure in (a), the material is classified as an insulator.

Post-Test: Actual classification of different materials.

paper	board clip
bracelet (Radhuim electoplate)	scissors
pin of glass	ear-ring
pencil	plastic knitting needle
ballpoint	a glass
paperclip	rubber band
wooden peg	6 penny nail
piece of yarn	silk thread
art eraser	nickle plated ring
hard rubber rod	plastic ruler

Remediation:

1. Discussion of what a conductor of electricity is and what insulators are.
2. Explain why some materials (because of their composition) will conduct electricity and some will not.
3. Perform more experiments in classifying materials as either conductors or insulators.

Module V

Objective: Student will demonstrate his knowledge of the basic facts of regrouping two digits in addition and subtraction not involving "zeroes" by being able to solve 8 out of 10 problems without making marks or lines for counting within the regular class period.

Pre-Test: Written test which includes regrouping of two digits addition and subtraction problems and one and two digit problems not involving regrouping.

Instructional Activity: Each child to complete these activities at their own rate.

1. Use concrete materials such as rods, beans, etc. The child will use the objects in counting and grouping different members in the three different places.
2. Drill of basic one digit addition and subtraction facts by memory without regrouping. (Verbal and written)
3. Use of games involving addition and subtraction that is both verbal and written. Such as math puzzles for adding and subtraction.
4. Use of written work using symbols--making use of regrouping in both addition and subtraction.
 - a. Writing math headlines, that will have students to make up problems of their own using, both one digit and two digits, regrouping in addition and subtraction.
 - b. Write questions to problems of addition and subtraction, then answering their questions using one and two digits and regrouping.

Post-Test: Regrouping of two digits addition and subtraction problems.

Remediation: Learning how to count with concrete objects and grouping objects according to sequence--Learning the Place Value of Numbers--(1, 10, 100).

Pre-Test:

4	2	23	12	48	77
<u>+4</u>	<u>+2</u>	<u>+23</u>	<u>+12</u>	<u>+48</u>	<u>+77</u>
5	9	53	48	43	61
<u>-7</u>	<u>-7</u>	<u>-12</u>	<u>-16</u>	<u>-14</u>	<u>-25</u>

Post-Test:

8	9	48	75	36
<u>+9</u>	<u>+9</u>	<u>+56</u>	<u>+28</u>	<u>+49</u>
10	17	48	56	72
<u>-9</u>	<u>-8</u>	<u>-39</u>	<u>-48</u>	<u>-13</u>

Module VI

Objective: The student will demonstrate his ability to write a news article of front page magnitude by writing a report of an event according to previously discussed criteria for news writing. This will be done individually in the class room without aids other than those in his head once the instructor has started him off. Spelling and grammar will not take precedence over factual accuracy and form according to previously discussed criteria. No time limit.

Prerequisite: Ability to "see" (observe), to communicate by writing.

Pre-Test: The student will write a short story on something that occurred during his past life.

Remediation: If child cannot construct intelligible sentences, work on sentence construction. Verbs; conjunctions, etc.--whatever is missing.

Instructional Activities:

1. Study parts of newspaper--contrast them.
2. Discuss difference between newspaper writing and short stories.
3. Discuss form of front page of newspaper.
4. Of article itself--How to write headlines, how to write lead sentences, what a dateline is, what is cutline, the purpose of pictures, the differences between facts and opinions.

5. From a newspaper article which appeals to the student, he will relay its information to the class orally. The class will analyze if and how it answers the six basic questions.
6. The child will write as many fictional news articles as he likes (making up events, etc.).
7. The students can look at each other's articles for view of variety of subjects to be seen in newspapers.
8. If desirable, kids can study proof-reading by:
 - a. as a class collaborating on various proof-readings of their own articles;
 - b. as individuals, doing exercises from English book on proof-reading for punctuation, logic, capitalization, comprehensibility;
 - c. in small groups, discussing classmate's articles.
9. Given a camera and one shot, kids can go shoot a picture and then write an article around it.
10. Given various thought-provoking pictures, the students will choose one and write a story around what can be observed in the picture (he can interpret details in his own way).

Post-Test: Murray will write a play centering around the kidnapping of Nixon, choose actors and organize it in utter secrecy. During their study hall, without warning, the rest of the class will become observers of the event; when it is over, the objective will be explained. If they have questions or wish to have a re-run, this can be arranged. To start them off, brief descriptions of what they saw can be given by some of the "witnesses." Or, if necessary, they can as a class discuss a good headline. If they are still insecure, discuss the lead sentence. From there, they are on their own.

Remediation: None necessary unless all or a majority of the children write utterly incompetent articles, which they will not (knowing the kids). If they by some happen chance do, then we'll drop it and go on to something else, such as myths, before coming back from a less deep angle.

Module VII

Objective: After having received the sentence-making exercise(s) the children will be expected to demonstrate their knowledge of verb conjugation. Students will demonstrate knowledge of the verbs was and were. Children will be given a list of sentences from which they will select the correct verb. (Verb to be) Children will not utilize notes and will be expected to accurately complete 15 of 20 sentences.

Prerequisite: Translated knowledge of the verb to be (Estar).
Knowledge of pronouns (I, they, we, he, it, you, etc.).

Pre-Test: Test written in Spanish--verbs to be translated to English.

El estaba

Ellos estaban

Nosotros estavamos

Ella estaba

Yo estaba

Instructional Activities:

1. Present mimeograph sheet with translations.
2. Teacher to read translations--aloud.
3. Have children read and translate phrases.
4. Pick Spanish phrases at random, ask children to read English translation.
5. Ask children to exchange phrases amongst themselves.
6. Prepare sentence utilizing these verbs--was and were.
7. Review sentences--emphasis accuracy.
8. Reinforce the verb--to be.

Post-Test: To facilitate reading and comprehension I will write test with sentences almost identical to previously prepared sentences.

Example:

Yesterday _____ (yo estaba) absent.

Remediation: Review pronouns.

El	- - -	He
Ellos	- - -	They
Yo	- - -	I

Module VIII

Objective: The student will demonstrate his understanding of the #8 by drawing a set of 8 on a piece of paper without the aid of his teacher or of other students in the classroom. 100% accuracy.

Prerequisite: Ability to count to 7; ability to count up to 7 subjects; ability to draw up to 7 objects.

Pre-Test: Draw 7 boxes on your paper by yourself or construct a set of 7 on your individual flannel board.

Remediation: Students will practice counting to seven with the use of 6" x 8" cards which have numbers one through seven.

Games:

1. Teacher throws cards all over room. Students put cards back in sequential order.
2. Students hide their eyes. One student mixes cards, another student then re-establishes the sequential order.
3. Students hide their eyes. Teacher hides cards around the room. Students are designated to find a specific number and to re-establish sequential order.
4. Teacher will write numbers from one to seven. She will make deliberate errors and allow students to correct errors.

Instructional Activities:

1. Clap to #8.
2. Count various concrete sets of eight in classroom not on paper (count boys, girls, chairs, chalk, erasers, books, cards, windows, etc.).
3. Students will count set of 8 which are on paper distinguishing sets of 8 from a set of another number by circling sets of 8.
4. Students will form sets of 8 on the flannel board.
5. Students will bring sets of 8 objects from their own home.

Post-Test: Student will draw a set of eight. This set may be eight objects, eight dots, or eight words or the student may make a creative drawing using the concept of eight such as an eight-armed man or an eight-eyed monster.

Remediation: Those students who cannot draw 8 objects or a picture demonstrating the idea of 8 will: (1) play a game in which the teacher sells various objects for 8 popsicle sticks. In order to get the object, the student must be able to count out 8 sticks to teacher; (2) form sets of eight on pegboard; and (3) form sets of eight blocks.

Western Kentucky University

The following section presents a sample of the curriculum developed for the Western Kentucky University Teacher Corps program. The sample is a module called "The Culture of Poverty," a part of Education 579: Deprivation and Education. A brief description of the course is provided; this is followed by a description of the module and a copy of the module pre-test.

Education 579: Deprivation and Education

Overview

This course will attempt to focus attention on the joint influence of home, school, and community on the developing child. As these influences are defined and interpreted, methods for filling in the gaps in the children's educational experiences will be explored. Cultural patterns of various groups (specific minorities and the rural poor) will be explored and analyzed by the students.

The four primary areas of the course will be divided into modules, some of which may be essentially omitted or explored in depth, depending upon the concerns of the individual students.

1. Understanding the Disadvantaged Child.

a. Objectives:

- (1) Develop an understanding of the social and psychological needs of deprived children.
 - (a) Develop an understanding of the cultures of specific racial and ethnic groups of disadvantaged children--Indians, Mexican-Americans, Puerto-Rican, and Negroes.
 - (b) Develop an understanding of the "culture of poverty" and its relation to middle-class values.
 - (c) Develop an understanding of the culture of the rural poor.
- (2) Help teachers to deal with their own feelings regarding children whose values, mores and folllsways are different from their own.
- (3) Develop an in-lepth understanding of at least one culturally disadvantaged child.

b. Modules:

- (1) The culture of poverty.
- (2) The social and psychological characteristics of the disadvantaged child.
- (3) I.Q. and the measurement of I.Q.
- (4) Techniques of child study.
- (5) The Indian child.
- (6) The Mexican-American child.
- (7) The Afro-American child.
- (8) The Puerto-Rican child.
- (9) The Migrant child.
- (10) The culture of rural Kentucky.

2. Understanding the Disadvantaged Child's Home and Community.

a. Objectives:

- (1) Sensitize teachers to unmet needs of the community which directly or indirectly affect the child's education.
- (2) Stimulate teachers to become involved in community activity which will directly or indirectly improve the lives of the disadvantaged children.
- (3) Focus attention on the joint influence of home, school, and community on the developing child.

b. Modules:

- (1) The home and family.
- (2) The nature and impact of the community.

3. Teaching the Disadvantaged Child.

a. Objectives:

- (1) Provide teachers with methods and techniques for teaching and reaching the disadvantaged.

- (2) Help teachers develop methods and techniques for encouraging responsibility, orderliness, punctuality, tolerance, initiative, and goal-directed behavior among disadvantaged children.
- (3) Examine methods for helping children overcome negative attitudes toward school, teachers, and authority in general.

b. Modules:

- (1) Teacher behavior and teaching techniques.
- (2) Teaching the disadvantaged in heterogeneous schools.
- (3) Remedial reading.
- (4) Remedial teaching in subject areas other than reading.

4. Programs for Teaching the Disadvantaged Child.

a. Objectives:

- (1) Help teachers evaluate various programs of compensatory education.

b. Modules:

- (1) The nature of compensatory education.
- (2) Programs in compensatory education.
- (3) Federal programs for the economically disadvantaged.

Education 579: Deprivation and Education

Module: The Culture of Poverty

Introductory Explanation:

On the first day of class the students will be given a pre-test covering a sampling of all material to be presented in the course. At the same time they will be asked to indicate interest, on a scaled instrument, in the various components of the course. Each test will be analyzed to determine major areas of weakness, and each interest inventory will be analyzed to determine the student's personal concerns. Then, in conference with each student, a program will be developed consisting of modules relating to both his needs and interests.

Each student will be expected to complete the same number of units of work. Certain modules will represent one unit of work, some two units, and some three. Those modules representing more than one unit of work may be subdivided in such a way that the student may do a part of the work for one unit of credit.

The module on poverty is a three unit module. Consequently, students may contract to do one-third, two-thirds, or all of the work involved in the module.

Objectives:

1. The student will understand varying attitudes toward poverty and its alleviation which might be found in the community.
2. The student will increase his understanding of how poverty affects the daily lives of the children he teaches.
3. The student will sense the frustration felt by people living in poverty.
4. The student will identify with individuals living in the culture of poverty.
5. The student will develop criteria for evaluating various approaches to the alleviation of poverty.
6. The student will understand how poverty breeds poverty.

Out-of-Class Activities: For one unit of credit: do activity 1 or 4 and activity 2 or 3 or 7; for two units of credit: do activity 1 or 4 and activity 1 or 4 or 5 or 6 and activity 2 or 3 or 7; and for three units of credit: do activity 1 or 4 and activity 1 or 4 or 5 or 6 and activity 1 or 4 or 5 or 6 or 2 + 3 + 7.

1. Read a novel, biography, or autobiography of a person or family living in poverty. Be prepared to discuss with the class:
 - a. the goals and aspirations of the poor.
 - b. saving and spending behavior.
 - c. attitude toward authority (e.g., police, school officials, landlord).
 - d. religious beliefs and practices.
 - e. relationships with kin.
 - f. quantity of friends, and relations with them.
 - g. involvement in secondary groups.
 - h. child-rearing practices.

- i. attitude toward education.
 - j. conformity to legal norms.
 - k. outlook for the future (optimistic-pessimistic).
 - l. material possessions.
 - m. educational background.
 - n. travel experiences.
2. Assemble in groups of 7-10 to play the game Ghetto. This is distributed by Western Publishing Company, Inc., School and Library Department, 850 Third Avenue, New York, New York 10022.
3. Assemble in groups of 2-20 to play the game Life Careers, distributed by Western Publishing Company.
4. Select one of the following topics for research, and prepare to report your findings to the class. This topic might be researched individually or with another person.
- a. Family life styles of the poor.
 - b. Emotional health of the poor.
 - c. Historical treatment of poverty.
 - d. The ramifications of relative deprivation.
 - e. Organizing the poor.
 - f. Social class and spending behavior.
 - g. Who the poor are.
 - h. How the conditions of poverty are sustained.
 - i. Poverty and politics.
 - j. Poverty and the economy.
 - k. Values of the poor.
 - l. A comparison between rural and urban poor.
 - m. Ideologies of poverty.
 - n. Poverty and the administration of justice.
 - o. Family planning and poverty.

5. Outline briefly what you would consider an appropriate governmental policy for dealing with poverty. Indicate which of the current programs you would retain, which you would modify, and which you would discard.
6. Describe poverty as it applies to your community. Through discussions with such community people as welfare workers, real estate workers, grocery store managers, and workers in various charitable organizations, determine the kinds of incomes and the ways in which the poor people secure the necessities of life. Find out how other people in the community feel about the low-income people among them.
7. Turn in reaction cards on two articles on the topic of poverty.

In-class Activities:

1. View and discuss the films "Hunger in America" and "Portrait of the Inner City."
2. Discuss the insights gained from reading a novel, biography, or autobiography of a person or family living in poverty. (See out-of-class activity A.)
3. Discuss findings of the students' research on poverty. (See out-of-class activity D.)

Pre-test for Module:

1. Describe the "culture of poverty" in terms of economic, social, and psychological characteristics.
2. Discuss the following statement: "The poor could help themselves if they would try."
3. Choose the best answer for each of the following questions:
 - a. Poverty breeds poverty because:
 - (1) or "catches" his desire for success from the people with whom he associates.
 - (2) the intelligence, necessary to get ahead is biologically inherited.
 - (3) middle and upper-class young people almost always have a "pull" with relatives or friends of their parents.
 - (4) all of the above.
 - b. The largest proportion of families in the poverty class are:
 - (1) aged.

- (2) headed by a person who is not employed full-time.
- (3) non-white.
- (4) fatherless.

c. It is not true that most of the unemployed poor:

- (1) live in rural areas where there are few opportunities.
- (2) can often read and write passably.
- (3) have experience in working with tools.
- (4) have histories of fairly steady work.

d. The term "hard-core poor" refers to:

- (1) multi-problem families who fail in nearly every way.
- (2) poverty which tends to perpetuate itself generation after generation.
- (3) unemployed poor who have been unemployed for more than 26 weeks.
- (4) those who are poor through laziness, indifference, and lack of ambition.

e. Poverty is relative to the prevailing standards of living, meaning that:

- (1) there is no absolute, unchanging poverty level.
- (2) today's poor may have twice what last century's poor had, yet be in still greater poverty.
- (3) today's poor may be separated from the comfortable by a greater gap than ever before.
- (4) all of the above.

4. True _____ False _____ Poverty is essentially an absolute deprivation of basic human needs and is thus much the same in all times and places.

Western Washington State College

The instructional module description which is provided here is one of thirteen "learning packages" which were produced according to the terms grant from the Office of Education to the Seattle Public Schools and Western Washington State College through the Washington State Office of the Superintendent of Public Instruction. The learning package presented here is entitled "Multi-Media Instruction" and was prepared by Robert M. Rice.

Prerequisites

Before attempting this learning package the instructional manager, hereafter referred to as the i.m., should have the following competencies:

1. Be able to write behavioral objectives.
2. Be able to adjust objectives to individual learners.
3. Be able to operate audio-visual equipment commonly found in schools.
4. Be able to prepare instructional materials commonly prepared by teachers.
5. Have acquired competence in a subject matter specialty.
6. Be able to prepare an instructional unit in behavioral terms for a subject matter specialty.

Instructional Objectives

Task I

The i.m. will be able to define the term "multi-media instructional package" to the satisfaction of the facilitator during the post-assessment.

Task II

The i.m. will be able to list the steps by which media is selected for a multi-media instructional package on the post-assessment.

Task III

The i.m. will design a multi-media instructional package.

Task IV

The i.m. will be able to implement a multi-media instructional package to the satisfaction of the facilitator.

Rationale

The multi-media concept in education can be used to meet the needs of students simultaneously. Also by engaging students with a media that is appropriate to their needs the i.m. can free himself from the role of large group instructor and serve as a tutor and counselor for these students who may need this attention.

Materials and Facilities Required

The i.m. will need access to audio-visual materials as well as a classroom of children.

Pre-Assessment

1. Define the term "multi-media instructional package."

2. List the steps by which media is selected for a multi-media instructional package.
 - a.
 - b.
 - c.
 - d.
 - e.
3. Have you ever designed a multi-media instructional package? If "yes" outline, briefly, the package you designed. Use the back of this page if necessary.
4. Have you ever implemented a multi-media instructional package in a classroom? If "yes" explain its value or lack of value to your teaching program. Use the back of this page if necessary.

Pre-Assessment Evaluation

Each item of the pre-assessment corresponds to a task of this learning package. That is, item 1 corresponds to Task I, and so on.

The facilitator must use caution when evaluating the respondent's definition of the term "multi-media instructional package" in item 1. If there is any doubt as to the respondent's understanding of this term, a "U" for unsatisfactory should be placed in the box on the prescription form for Task I (see below). If the definition is satisfactory, an "S" is given for this task. The respondent's definition should resemble the following.

A multi-media instructional package consists of a complete unit of instruction which includes some of the following: tape lectures, slides, motion pictures.... Each package is highly individualized so that each student can progress through it at his own speed. The teacher is freed to work on an individual basis with each student.

For item 2 the respondent must list the following to receive an "S" for Task II. All other answers result in a "U" for this task.

1. State the objectives to be covered by an instructional unit that you have prepared or are familiar with.
2. Select at least two media that would be appropriate to meet each of these objectives.
3. Adjust the objectives of your unit to the individual learners by matching each learner to one of the media selected for each objective.
4. Assemble the media needed to meet the objectives of your unit.
5. Make media substitutions if necessary.

If the respondent answers "yes" for item 3 and has outlined a multi-media unit in the judgment of the facilitator, an "S" should be given for Task III. All other answers result in a "U" for this task.

If the respondent answers "yes" for item 4 and received an "S" for item 3, an "S" should be given for Task IV. The respondent's statement about the value or lack of value of multi-media will not influence the evaluation of this task.

Prescription Form

	Pre-Assessment Results	Post-Assessment Results	Remediation Recommendations
Task I			
Task II			
Task III			
Task IV			

"S" for Satisfactory

"U" for Unsatisfactory

Task I

The i.m. will be able to define the term "multi-media instructional package" to the satisfaction of the facilitator during the post-assessment.

1. James L. Olivero has defined multi-media as "...those materials which elicit multisensory (e.g., sight, smell, touch, etc.) response from the student. Certainly, educational psychologists have confirmed the theory that instruction via the multi-media aids can produce modifications of behavior through learning. The concept of multi-media aids suggests a predetermined rate and mode of presentation without continued direction by the teacher.

Examples of multi-media aids are: tape recorders, records, mock-ups, filmstrips, still and moving pictures, mock-downs, television, maps, globes, programmed learning materials, reading accelerators, micro-projectors, and so forth. The list could go on ad infinitum, but examples of the multi-media aids are inappropriate unless the teacher can use the aids as additional tools for improving the quality of instruction generally and individualizing the instruction specifically."

From: James L. Olivero, "Technological Aids and Independent Study,"
Independent Study: Bold New Venture, edited by David W. Begg, III
and Edward G. Buffie (Bloomington, Ind.: Indiana University
Press, 1965), page 141-142.

Burt Harrell has pushed the basic idea of multi-media aids a bit further when he discussed multi-media instructional packages. He states that an instructional package "...consists of a complete unit of instruction from a pretest to a posttest. It includes some or all of the following: laboratory activities, reading assignments from the text, lectures by the instructor, taped lectures, slide presentations, motion pictures, sample displays, mapping activities, simulated field trips, and educational games. Each package is designed to provide a high degree of individualized instruction so that each student can progress at his own rate; the teacher, freed from repetitive class presentation has time to confer with students or prepare study materials."

From: Burt Harrell, "Audiovisual Programs and Science Instruction,"
Audiovisual Instruction, XV (February 1970), page 27-29.

2. List as many types of media as you can, using the above as references.

3. From Harrell and Oliveros' statements, what does a multi-media package do for the teacher?

4. From Harrell and Oliveros' statements, what does a multi-media package do for the student?

5. Write a concise definition of a multi-media instructional package.

Task II

The i.m. will be able to list the steps by which media is selected for a multi-media instructional package on the post-assessment.

1. State the objectives to be covered by an instructional unit that you have prepared or are familiar with.

Objectives:

a.

b.

c.

(Use the back of this page if necessary.)

2. Select at least two media that would be appropriate to meet each of these objectives.

Objective

Media

a.

a₁-

b.

a₂-

b₁-

c.

b₂-

c₁-

c₂-

(Use the back of this page if necessary.)

3. Adjust the objectives of your unit to the individual learners by matching each learner to one or more media as needed for each objective. (Use another sheet of paper.) All students do not proceed through all media. Also adjustment of objectives to each learner is an ideal to seek but failure to reach this is not to be construed as improper instruction.
4. Assemble the media needed to meet the objectives of your unit. List the media and where it can be found.

Media

Location

a.

b.

c.

d.

(Use the back of this page if necessary.)

5. Make media substitutions if necessary.

Task III

The i.m. will design a multi-media instructional package.

1. After having completed Task II, determine the time to be allocated for your instructional unit. Prepare an open calendar covering the time allocated for your unit. The calendar below is a model that may be helpful. It is recommended that the i.m. develop his own form.

Calendar

2. Prepare pretests and posttests for your unit and schedule them on the calendar. Note that posttests need not be traditional paper and pencil tests and need not be inconsistent with individualization.

Calendar

Pretest				
				Posttest

3. Determine which activities are to be carried out in large group sessions and schedule them on the calendar.

Calendar

Pretest	Lecture by teacher			
		Motion picture	College Bowl Review	Posttest

4. Determine which activities are to be carried out in small group sessions. Note that a student who is not scheduled for a small group session is expected to work on an individual basis.

Calendar

Pretest	Lecture by teacher	Small group tape		Small group discussion
Small group filmstrip	Small group simulated field trip	Motion picture	College Bowl Review	Posttest

5. Determine which activities are to be carried out on an individual basis.

Calendar

Pretest	Lecture by teacher	Small group tape indiv. activities	Individual activities	Small group discussion ind. activities
Small group filmstrip ind. activities	Small group field trip ind. activities	Motion Picture	College Bowl Review	Posttest

Task IV

The i.m. will be able to implement a multi-media instructional package to the satisfaction of the facilitator.

1. Administer the Pretest for your unit to a class of students.
2. Prescribe the activities required by each student to meet the objectives of the unit.

Sample Prescription Form

Name _____

Date: _____

All students must:

- a) Take notes on the lecture by the teacher.
- b) Watch the motion picture.
- c) Take part in the "college bowl" review.
- d) Take the unit Posttest.

You must also:

- a) ☐ Listen to the tape lecture.
- b) ☐ Take part in the small group discussion.
- c) ☐ Watch the filmstrip.
- d) ☐ Take part in the simulated field trip.
- e) ☐
- f) ☐

You may select _____ of the following:

(Follows a list of activities, at least one of which should be a free choice activity.)

CALENDAR				
Pretest	Lecture by teacher	Small group tape lecture	Individual activities	Small group discussion
		Individual activities		Individual activities
Small group filmstrip	Small group simulated field trip	Motion Picture	College Bowl Review	Posttest
Individual activities	Individual activities			

3. Consider the following:

Less complicated multi-media instructional package designs are best for early experiments with this method of instruction.

Younger children will need shorter units.

Remind the students where the class is in relation to the calendar at the beginning of each day.

Make carbons of the student Prescription Forms as they will often misplace theirs.

Place a copy of the Calendar on the bulletin board so that students can refer to it often.

Prescribe more required activities for less self-directed students.

Remember the purpose of the multi-media instructional package is to free the teacher to work with individual students.

Do not be discouraged if a multi-media instructional package seems to take much time to prepare. Once prepared the teacher should have little to do but work with individual students and administer the package. Remember that you are preparing several days or weeks of instruction when you prepare a package.

It is to the teacher's advantage to prepare a unit covering a long period of time as this cuts the ratio of preparation time/class time.

Explore many different kinds and combinations of media.

If it works, use it!

Good luck!

Post-Assessment

Repeat the Pre-assessment.

Post-Assessment Evaluation

Repeat the Pre-Assessment Evaluation. If the i.m. is found to be deficient on any task at this point the facilitator will note this fact on the Prescription Form and will recommend appropriate remediation.

SECTION VII: STAFF DEVELOPMENT CONFERENCES AT THE
STATE UNIVERSITY COLLEGE AT BUFFALO

The section which follows contains copies of four documents describing various aspects of development efforts at the State University College at Buffalo:

1. An article from the Fall 1970 edition of "Perspectives," the newsletter of the faculty of Professional Studies, which describes Project PACT and its goals regarding performance-based certification.
2. A copy of the agenda for a conference held at the College on December 7, 1970--"New Certification Processes for Teachers Based on Performance Assessment and a Multi-Agency Approach."
3. A copy of the agenda for a two-day conference held on January 11 and 12, 1971.
4. A copy of a program--in instructional module format--designed by Robert L. Arends, Program Development Specialist for a conference held in Buffalo on April 28, 1971; the conference focused on the concept of competency-based teacher education and involved all of the colleges, many BOCES personnel, and many public school personnel from Western New York.

APR 11 1960

Teacher Certification Under Scrutiny

Finding a new approach to teacher certification.

That's the task of the recently organized Project PACT (Performance Assessment Certification Team) headed by Dr. Caryl G. Hedden, professor of education, who has just returned from a year as co-director of the college's Semester in Siena program.

Project PACT currently includes representatives from Buffalo State University College, the State University of Buffalo, the State Education Department, New York State Teachers Association, The Board of Cooperative Educational Services and the community of Williamsville.

As the year progresses, the project hopes to expand to involve more teachers and representatives from other area school districts, parent-teacher associations and teacher education institutions.

"Our object," said Dr. Hedden, "is to pursue a trend that is rapidly developing. We want to find alternate ways to certification based upon the performance of teachers rather than the mere accumulation of course credits."

The past and present procedure involves taking a certain number of courses to meet state requirements. Once these requirements are met, a teacher is certified.

The New York State Education Department has been encouraging area educators to work together to create new ways for assessing the performance of teachers as another approach to certification.

This is an attempt to assure that a teacher can actually do the things a teacher is expected to do in the classroom in working with children to encourage learning, Dr. Hedden added.

The problem is very complex, he continued, because methods of assessing individual behavior objectively must be developed which can deter-

PACT Studies Certification . . .

(Continued from Page 1)

under the stimulus of Dean Robert B. Simpson of the Faculty of Professional Studies and Dr. John D. Mulhern, director of the Education Division, has set these primary objectives:

1. To provide leadership, guidance, stimulus, direction and co-operation in developing teacher performance assessment criteria for certification.

2. To recommend to the State Education Department a plan for utilizing these criteria for certification of teachers.

3. To encourage and sponsor research in performance assessment and development of behavior models.

4. To involve representative groups concerned with teacher education and certification and to co-ordinate activities in developing performance assessment criteria.

Currently several groups at Buffalo State are also working in this area. They include the Teacher Corps; members of the Art Education Division Teacher-Learner Project and participants in the Lackawanna Project, a pilot urban teacher education program.

The fifth cycle Teacher Corps program is one of seven across the country which has been selected to develop a competency based teacher education program. A federal grant has brought Dr. Robert Arends, formerly of Michigan State University, to the college to serve as staff developer for the corps.

mine those who have the ability to perform in the classroom and those who don't.

"This approach may become an alternate route for people with unique talent and character who can achieve a level of classroom performance, perhaps without all the standard preparatory experience," Dr. Hedden said.

If models of performance, which take into account the variability of teacher tasks and teacher personality, can be scientifically developed, a person without all the required college courses could be tested on his ability to perform in certain situations by participating in a set of experiences. If his performance equalled or exceeded that of the model, he could be on his way to certification.

Project PACT, which was formed

(Continued on Page 2)

He will not only collect and disseminate data related to the research portion of the corps program, but he also will serve as a consultant to the instructional staff which will be involved with developing instructional modules.

Lackawanna Project members spent two weeks during the summer writing behavioral objectives for performance assessment.

During the current academic year the council hopes to stimulate the formation of some study groups and experimental programs in various local school districts.

**ANNOUNCEMENT from PACT
"Performance Assessment Certification Team"**

REGIONAL CONFERENCE

on

NEW CERTIFICATION PROCESSES FOR TEACHERS

Based on

PERFORMANCE ASSESSMENT

and a

MULTI-AGENCY APPROACH

(Professional Associations — School Districts — Higher Education Institutions)

Hear DR. HERBERT HITE on this topic

Monday, December 7, 1970

7:30 p.m.

State University College at Buffalo

Campus School Auditorium

Program

PERFORMANCE BASED TEACHER CERTIFICATION

A NEW APPROACH

State University College at Buffalo

Monday, December 7, 1970

Campus School Auditorium

7:30 p.m.

Chairman

DR. CARYL G. HEDDEN
PACT Coordinator

Welcome

President E. K. FRETWELL, JR.
State University College at Buffalo

Performance Assessment —
Promise or Panic?

DR. ROBERT B. SIMPSON, Dean
Faculty of Professional Studies
State University College at Buffalo

WHY Performance Assessment
Certification for New York State

THEODORE E. ANDREWS, Associate
Bureau of Teacher Education
Division of Teacher Education and Certification
New York State Education Department

"PERFORMANCE ASSESSMENT CERTIFICATION: The WASHINGTON STATE MODEL"

PROFESSOR HERBERT HITE
Western Washington State University

Panel of Interrogators...

For — Professional Associations

MARGUERITE J. WALTERS, Coordinator
of Professional Services, NYSTA

For — School Districts

DR. JERRY J. HERMAN, Superintendent
Lewiston-Porter Central School

For — Teacher Preparation Institutions

DR. CHARLES R. FALL
Professor of Education, SUNYAB

For — Teacher Education Students

DONNEE HILL, Teacher Corps
Mrs. Judith Baskin, Lackawanna Project

For — Community

MRS. FLORENCE E. BAUGH, Director
Ellicott CAO Center

Audience Participation

WHY THIS CONFERENCE NOW?

The New York State Education Department is committed to developing new processes for teacher certification based on performance assessment, i.e., — proven ability to do what teachers are expected to do, rather than the present process of course accumulation. These new processes must involve school districts and professional associations as well as higher education institutions preparing teachers. Thus, YOU will be involved.

WHY PACT?

PACT — "Performance Assessment Certification Team" — is a Western New York regional planning group representing many education-concerned agencies cooperating with the New York State Education Department in developing recommendations for this "performance" approach to certification.

Serving on PACT are representatives of:

SCHOOL DISTRICTS — COLLEGES/UNIVERSITIES — LOCAL
TEACHER ASSOCIATIONS — NYSTA — PTA — COMMUNITY —
STUDENTS — NEW YORK STATE EDUCATION DEPARTMENT.

The CONFERENCE will explore the ROLES each agency may play.

State University College
1300 Elmwood Avenue
Buffalo, New York 14222

PROFESSIONAL CONFERENCE ON JANUARY 11 and 12, 1971

The Division is sponsoring a two-day conference on January 11 and 12th as a follow-up to the sessions on December 7 and 8th with Dr. Hite. The program has been cooperatively planned with the Advisory Council by Dr. Masla and is designed to bring us up-to-date information on teacher education which is not readily available through other sources.

The program on January 11 will be as follows:

9:00 a.m.: Dr. Vincent Gazetta, N.Y. State Dept. of Education

10:30 a.m.: Dr. Will Weber, Syracuse University

12:00 noon: Lunch

1:00 p.m.: Dr. James Collins, Syracuse University

2:30 p.m.: Questions -- Discussion Period

3:30 p.m.: Close of session

The program on January 12 will consist of four options, of which you may choose two. The directors of four of the Model Elementary Teacher Education Programs will hold a morning and an afternoon seminar session on their respective model program. The sessions will be discussion-oriented rather than information-oriented and you may want to brush up on the model overviews. Each session will be limited to 25 persons and we will have a scheduling procedure worked out before January 11th. The models and the directors are:

ComField Model: Dr. Del Schalock, Northwest Regional Laboratory

Florida State Model: Dr. Norman Doodl, Florida State University

Michigan State Model: Dr. Robert Houston, University of Houston

Wisconsin Model: Dr. Vere DeVault, University of Wisconsin

The January 11th sessions will be held in the Campus School Auditorium.

The January 12th sessions will be scheduled in various Campus School rooms.

A Module Cluster designed to
Convey Information relative to
Competency-Based Teacher Education
and Performance-Based Certification

by

PACT Conference Committee

Robert Arends - Program Development Specialist - Teacher Corps

Louis Fabiano - President, Maryvale Education Association

Charles Fall - SUNY at Buffalo

Carl Hedden - PACT Chairman

Sister Karen Kolbeck - Medaille

Steven Korach - Lackawanna Public Schools

William McQuay - President Lewiston-Porter Education Association

Willard Schum - SUCB

April 28, 1971

Conference Moderators

Charles Fall - SUNY at Buffalo

Louis Fabiano - Maryvale

General Objectives

The general objectives of this module cluster are: To provide members of PACT and other interested parties background information relative to Competency-Based Teacher Education and Performance-Based Certification. To provide the opportunity for small group interaction concerning the topic both at the cognitive and affective levels. To stimulate interest and further inquiry on the part of all parties concerning Competency-Based Teacher Education and Performance-Based Certification.

Cluster Prerequisites

Cluster prerequisites include but are not limited to the following:

1. A position of responsibility and leadership in education.
2. A desire to learn more about Competency-Based Teacher Education and Performance-Based Certification.
3. Willingness to attend conference.
4. Open mind.

Modules Within the Cluster

This cluster contains six modules, the majority of which are related to the topic of Competency-Based Teacher Education and Performance-Based Certification. The Modules are as follows:

PACT:001:01	Registration, Coffee, Breaks, and Lunch
PACT:001:02	Concept and position of various agencies
PACT:001:03	Reports from on-going programs.
PACT:001:04	Question and answer session.
PACT:001:05	Small group discussions.
PACT:001:06	Wrap-up session.

Objectives

The conference participant will be able to acknowledge his registration and provide identification to other participants. The participant will have partaken of a stimulant of his choice and thus will stay awake during the conference. The participant will have obtained and consumed sufficient mid-morning nutrition to avert hunger pains. The participant will have consumed lunch in order to maintain proper nutrition. The participant will be sufficiently refreshed by the mid-afternoon R and R to continue until the end of the conference.

Prerequisites

The participant will need to arrive at the Clardon between 8:30 and 9:00 a.m. on April 28, 1971.

Pre-Assessment

None

Activities

1. Pre-conference (8:30-9:00)
 - a. Pay conference fee if not pre-registered.
 - b. Obtain name tag, complete same if not pre-registered, and pin or fasten on left side of chest.
 - c. Drink coffee (cream and sugar optional).
 - d. Circulate and converse with fellow participants.
 - e. Report to main conference area and be seated by 9:00 a.m.
2. Mid-morning break (10:20)
 - a. Attend to personal needs.
 - b. Secure coffee and rolls, consume same (optional).
 - c. Return to session by 10:40.
3. Lunch (12:00)
 - a. Attend to personal needs.
 - b. Obtain and consume spiritus fruitmentum (optional).
 - c. Consume lunch.
 - d. Report to small group session at 1:15.
4. Mid-afternoon break (3:00)
 - a. Attend to personal needs.
 - b. Obtain and consume refreshment (optional).
 - c. Report to main conference area for summary discussion.

Post-Assessment

The success of this module will be determined by:

1. Attendance of invited participants (80% will signify success).
2. Participants awake during conference (less than 5% sleeping will signify success).
3. Participants remaining during entire conference (80% will signify success).

Objective

The participant will have assimilated sufficient cognitive information in regard to Competency-Based Teacher Education and Performance-Based Certification, as interpreted by NYSTA, New York State Education Department, and PACT to understand the concept and its implications for the future.

Prerequisites

Successful completion of module PACT:001:01 section 1-e.

Activities

1. Listen to presentations as follows: (9:00-10:20)
 - a. Introduction to Concept Dr. Robert Arends, SUCB
 - b. The State Education Department Viewpoint "Process Standards) Mr. Ted Andrews, State Education Department
 - c. The NYSTA Position Miss Margarite Walters, NYSTA
 - d. PACT: Where Does It Fit? Dr. Caryl Hedden, SUCB
2. Read materials related to the subject (These materials are listed in the bibliography on page at the back of the program.)
3. Participants Option

Post-Assessment

None.

Notes

Objective :

The participant will have assimilated sufficient cognitive information to appreciate the problems of implementing a Competency-Based Teacher Education program.

Prerequisites

Successful completion of module PACT:001:01 section 2-c.

Pre-Assessment

None

Activities

1. Listen to presentations as follows: (10:40-11:20 a.m.)
 - a. The Lackawanna (UUTEP) Project Mr. Donald Graves,
Lackawanna
 - b. Buffalo Teacher Corps Dr. John Masla, SUCB
2. Read materials related to the subject. These materials are listed in the bibliography at the back of the program.
3. Participant's Option.

Post-Assessment

None

Notes

Objective

The participant will take an active role in asking questions regarding the previous presentations.

Prerequisites

Attendance at and alertness during presentations.

Pre-Assessment

None.

Activities (11:20 a.m. - 12:00 noon)

Be an active participant of the discussion by asking questions and/or listening to the answers.

Discussion Leader: Dr. Charles Fall, SUNY at Buffalo.

Post-Assessment

None.

Notes

Objective

The participant will take an active role during small group sessions in reacting to prepared questions regarding Competency-Based Teacher Education and Performance-Based Teacher Certification.

Prerequisites

1. Successful completion of Module PACT:001:01 section 3-d.
2. Attendance at proper group (announcement of groups and area during pre-lunch question and answer session).

Pre-Assessment

None.

Activities (1:15 - 3:00 p.m.)

1. Discuss prepared questions and statements:
 - a. What Competencies? Established by Whom?
 - b. What is the role of each of the agencies; that is, College, Public Schools, Community, Associations, State Department, and so forth?
 - c. Is a competency-based program inhumane and rigid?
 - d. Who will judge the performance?
 - e. Can it be done in all disciplines?
2. Formulate and react to own questions.
3. Choose most burning issue for further discussion in final session:

Discussion Leaders:

James Conti	NYSTA
Steve Kcrach	Lackawanna
Sister Maura	Rosary Hill
William McQuay	Lewiston-Porter
Lucy Stephenson	Rosary Hill
Steve Winter	SUNY at Buffalo
Sister Karen	Madaille (alternate)
John Mulhern	SUCB (alternate)
Dan Weppner	SUCB (alternate)
James Young	SUCB (alternate)

Post-Assessment

Post-assessment will be measured by the amount of meaningful discussion and feedback generated from the groups.

Objectives

The participant will have assimilated sufficient cognitive information concerning the "burning issues" regarding Competency-Based Teacher Education and Performance-Based Teacher Certification to internalize the concept and problems.

Prerequisites

Successful completion of Module PACT:001:01 section 4-c.

Pre-assessment

None.

Activities (3:15 - 4:00 p.m.)

Listen to the discussion of the burning issues by the panel. Questions from the floor will be welcomed if time permits:

Discussion leader: Mr. Louis Fabiano, Maryvale Educators Association.

Post-Assessment

Individual satisfaction on the part of the participants that they have a clearer understanding of the concept, issues, and problems.

Notes

Selected Bibliography on Competency Based Teacher Education and
Performance Based Certification

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Material to look for: AACTE-AASA-OEO Task Force "72" Bibliography.

SECTION VIII: IN-SERVICE PROFESSIONAL CONFERENCES
AT TEXAS SOUTHERN UNIVERSITY

The section which follows contains copies of the programs from four In-Service Professional Conferences which were held at Texas Southern University. The conferences were sponsored by the Teacher Corps Project, the Basic Skills Programs in Language and Language Arts, the Training of Trainers of Teachers Project, and the Department of Secondary Education. The conferences which were held January 12, February 9, March 12 and 13, and April 14 and 15, 1971, focused on four major topics: (1) competency-based education and instructional modules, (2) teaching models and behavioral objectives, (3) the Individualized Performance-Based Teacher Education Program, and (4) the systems approach to curriculum improvement. Copies of the conference programs follow.

An
IN-SERVICE PROFESSIONAL CONFERENCE
on
COMPETENCY BASED EDUCATION:
INSTRUCTIONAL MODULES



At
TEXAS SOUTHERN UNIVERSITY

For the Staff of

TEXAS SOUTHERN UNIVERSITY

*

Presented By

THE TEACHER CORPS
(PETCO)

in cooperation with

THE BASIC STUDIES PROGRAMS
IN LANGUAGE ARTS AND MATHEMATICS

and the
TRAINING TRAINERS OF TEACHERS PROGRAM
(TTT)

on

TUESDAY, JANUARY 12, 1971

At

9:30 a. m.

in the AUDITORIUM of the M. L. KING Humanities Building

-119-

CONFERENCE TIMETABLE

TUESDAY, JANUARY 12, 1971

9:00 - 9:30 - Coffee (Foyer, MKL Building)

9:30 - 11:45 - FIRST GENERAL SESSION

Dr. H. H. Hartshorn, Presiding
Vice President - Texas Southern University

GREETINGS Dr. Robert J. Terry, Dean
College of Arts and Sciences
Texas Southern University

SYMPOSIUM Project Directors
Hunter O. Brooks, Moderator
Coordinator of TSU History Education Program
American Historical Association

- . Dr. W. R. Strong, Director
Basic Studies Program in LANGUAGE ARTS
- . Dr. L. L. Clarkson, Director
Basic Studies Program in MATHEMATICS
- . Dr. C. A. Berry, Coordinator of Field Activities
Training of Trainers of Teachers (TTT)
- . Dr. J. O. Perry, Director
Teacher Corps Program (PETCO)

11:45 - 1:30 - LUNCH - DUTCH

(Note: Lunch has been prepared for you in Bolton Hall. Please also note that tables have been set up by departments to permit further dialogues on the proceedings thus far.)

1:30 - 4:00 - SECOND GENERAL SESSION

Dr. Robert J. Terry, Presiding
Dean, College of Arts and Sciences
Texas Southern University

Introduction of Presenter Dr. Leon Belcher
Director of Institutional Research
Texas Southern University

PRESENTATION - "Instructional Modules:

"Instructional Modules: Their Development and Use"

**Dr. Charles E. Johnson, Director
Educational Models Project
University of Georgia
Professor of Education**

QUESTIONS and ANSWERS

REACTIONS

National Representatives of the Four Programs

- . Dr. Mary Jane Smalley, Chief of the TTT
Trainers of Teacher Trainers**
- . Dr. Daniel Thompson, Director, Leadership Training Institute
(TDDS) - Dillard University**
- . Dr. W. R. Hazard, Member-Leadership Training Institute
TTT Projects - Northwestern University**
- . Mr. Ray Mazon, Regional Director
Teacher Corps**

Moving innovative teaching techniques from off the printed page into the classroom is one of the major problems facing teacher training institutions today. We believe that probably the most effective way is to involve the entire staff in work-training sessions in which the new approach is actually used. Thus, this one-day conference on instructional modules, learning modules, and behavior modification. Today's conference will be followed by small group meetings, large group meetings and work sessions. We trust that you will become involved!!!

TO START YOUR THINKING

A. Glossary of Terms

Competency Based Teacher Education:

A program in which the competencies to be acquired by the student and the criteria to be applied in assessing the competency of the student are made explicit and the student is held accountable for meeting those criteria. The competencies referred to are those attitudes, skills, understandings, and behaviors which facilitate the intellectual, social, emotional, and physical growth of students. Therefore, the criteria used in assessing the competency of students are of three kinds:

Knowledge Criteria which are used to assess the cognitive understandings of the student.

Performance Criteria which are used to assess the teaching behavior of students.

Product Criteria which are used to assess the student's ability to teach by examining the achievement of pupils taught by the student.

Instructional Objectives:

Those competencies which specify behaviors (and possibly attitudes, skills, and/or understandings) to be acquired by the student.

Competency Based Curricula:

Programs in which the competencies to be acquired by the student and the criteria to be applied in assessing the competency of the student are made explicit and the student is held responsible.

Systems Analysis Approach:

The rigorous application of systematic techniques in program design and operation.

Field Oriented Curricula:

Programs which are reality oriented with students spending a considerable portion of their time in interaction with children in school settings.

Personalization of Instruction:

Programs which use a series of learning activities intended to facilitate the students' achievement of specific objectives as compared with programs which use a less flexible course structure.

Utilization of Instructional Modules:

Programs which use a series of learning activities intended to facilitate the student's achievement of specific objectives as compared with programs which use a less flexible course structure.

B. Questions for Discussion

In what respects does a competency based program differ from what we are already doing?

How should the competency level be determined and who should determine it?

If a decision is made by professional education to move in the direction of competency based education, to what extent should the other disciplines be involved? How can such involvement be assured?

How might we go about setting up competency levels for the courses offered in our several departments?

To what extent should the community be involved in our movement toward competency based education?

To what extent should elementary and secondary school personnel be involved in our moving toward competency based education?

What is the role, if any, of the systems approach in making decisions relative to competency based education?

ANNOTATED BIBLIOGRAPHY

Gideonse, Hendrik D. "Behavioral Objectives; Continuing the Dialogue," The Science Teacher. 36:5154 (January, 1969).

Describes the development of behavioral objectives as the generation of criterion measures which will help whether the curriculum development activity has value before it has begun, which will serve as effective and modifiable guides to the curriculum development process, and which will provide at least minimum standards by which the efficiency and effectiveness of the completed product can be assessed.

Four questions were considered:

1. What should we mean by the phrase "behavioral objectives"?
2. What criteria (or whose?) should we employ in our attempt to better the practices, process, materials, and organizational forms by which we carry out instruction and education? Which should we think about before we begin, which should we think about as we proceed, and which should we apply after we have completed an effort? Whose criteria of "better" do we accept?
3. Do we know enough about learning, cognitive development, motivation, and so on to build instructional systems of greater effectiveness than the ones we currently use in our schools?
4. What conclusions, if any, should we draw from the fact that curriculum building costs millions of dollars? How should we ask for results? How do we determine accountability? How do we judge whom and what to support.

Hengst, Herbert T., "A Question of Accountability," Journal of Teacher Education, XVII, No. 1, 27-33, 1966.

Emphasizes the potential influence of teacher-scholars on millions of individuals, society and history. Such influences raise a serious question regarding professional accountability (willingness and ability to be answerable for claimed competence as a teacher, a scholar and a service agent). Higher Education establishes its accountability through accreditation processes; systematized and formal approaches to professional accountability of college teachers is at best laissez faire. Discussed the arguments for and against the need for a more formalized pattern of accountability.

1. Should provide opportunities to demonstrate one's competence in the teaching function and in scholarly activities.
2. Should be conducted by representatives of the academic profession whose competence has been established.
3. Must be readily communicable to the nonprofessional public.
4. Should be characterized by standards that deal with entry-level competencies.
5. Should provide for an endorsement of the individual by an official endorsing body.

Popham, W. James and Baker, Eva L. Systematic Instruction, Prentice-Hall, Inc., Englewood Cliffs, New Jersey: C. 1970.

Proposes a four step goal-referenced model for a systematic approach to instruction which focuses on the learner. The four steps (specification of objectives, pre-assessment, instruction, and evaluation) and their interdependencies are explored. The model is then related to the sequencing approaches of Bloom and Gagne, as well as various situations in the educational setting.

Popham, W. James, "The Performance Test: A New Approach to the Assessment of Teaching Proficiency," Journal of Teacher Education, XIX, No. 2, 216-222, 1968.

Discusses the dilemmas confronted in attempting to measure teacher effectiveness by way of ratings, checklists, observation schedules and scales, and standardized achievement tests administered to students. Proposes that teacher-competence assessment should be based on the criterion of pupil growth. Discusses several theoretical problems (e. g., validation of performance tests and making operational objectives sufficiently reliable and discriminating to attest real differences in performance) and practical problems (e. g., securing cooperation of schools for try-out purposes and the effect on teacher enthusiasm for teaching when they are given prescribed objectives). Results of an experimental field trial of a performance test (which included resource materials, instructional objectives and pro and post-tests) by three experienced teachers and three inexperienced teachers showed that students under the experienced teachers made significantly higher scores than students under the inexperienced teachers.

Weinstein, Gerald and Fantini, Mario D. Toward Humanistic Evaluation: A Curriculum of Affect. Praeger Publishers, New York, 1970.

The "secret" of motivating the child to involve himself in the learning process -- whatever his age, socio-economic level, or cultural background -- is to deal in some way with the deep underlying feelings, wishes, and fears that stimulate his actions and color his response to the world.

This was the major finding of the Elementary School Teaching Project, and action-research program undertaken by the Ford Foundation's fund for the Advancement of Education in an attempt to discover teaching practices that had proved successful with ghetto children. Spurred by this conclusion, the program staff turned its efforts to the development of a "curriculum of affect," a model for teaching based on pupils' concerns and feelings rather than on purely cognitive goals. By adapting this model, described and illustrated in this book, to suit his own competencies and the needs of his students, the teacher can identify his pupils' concerns, use them in teaching standard intellectual content, or deal with them directly, as content in their own right. The model thus embodies an open-ended approach to teaching and learning that engages the child as a whole-hearted participant in the educational process by making that process "relevant" to him in the most profound sense.

IF YOU CARE TO READ!

Allen, W. C. et al., "Performance Criteria for Educational Personnel Development: A State Approach to Standards," Journal of Teacher Education, 20:133-35, 1969.

Berman, Mark L., "Educational Innovation from College Down," Educational Technology, 9:31-32, January, 1969.

Elam, Stanley, "The Age of Accountability Dawns in Texarkana," Phi Delta Kappan, LI, No. 10, 609-14, June, 1970.

Glaser, Robert, "Theory of Evaluation of Instruction: Changes and Trends," Proceedings of the Symposium on Problems in the Evaluation of Instruction, Occasional Report No. 13, University of California, Los Angeles.

Silverman, Robert E., "Theories and Models and Their Utility," Educational Technology, 7:1-6, October, 1967.

An
IN-SERVICE PROFESSIONAL CONFERENCE
on
TEACHING MODELS
and
BEHAVIORAL OBJECTIVES

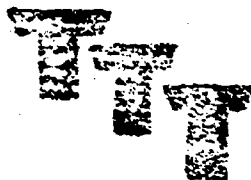


At The
South Central Branch YMCA
3531 Wheeler Street
Houston, Texas 77004

TEXAS SOUTHERN UNIVERSITY

*

Presented By



TRAINING THE TRAINERS
OF TEACHERS

in cooperation with

THE BASIC STUDIES PROGRAMS
IN LANGUAGE ARTS AND MATHEMATICS

and the

TEACHER CORPS PROJECT
(PETCO)

on

TUESDAY, FEBRUARY 9, 1971

at

7:30 p. m.

Room A - South Central Branch YMCA

3531 Wheeler Street

-128-

A G E N D A

- I. Welcome**
- II. Rationale for Inservice Program**
- III. Pretest**
- IV. Objectives**
- V. Teaching Models**
 - *. Behavioral Objectives**
 - . Entering Behavior**
 - . Instructional Procedures**
 - . Instructional Assessment**
- VI. Techniques in Writing Behavioral Objectives**
 - . Taxonomy**
 - . Basic Components**
 - (a) Terminal behavior**
 - (b) Conditions**
 - (c) Criteria**
- VII. Examples of Behavioral Objectives**
- VIII. Post-test**
- IX. Feedback**

***To be discussed as a major topic**

RATIONALE

The frontiers of education are not static; they are vibrant and dynamic. We, the associates of experimental programs, are on the cutting edge of new approaches, developments, and innovations in education. Departmental chairmen are in an excellent position to test the validity and reliability of innovative changes. Therefore, we would like to share with you some of the things that we are doing with our participants in hopes that you will provide a fertile environment for their continuous growth and development.

Moving innovative teaching techniques from off the printed pages into the classroom is one of the major problems facing teacher training institutions today. We believe that probably the most effective way to involve the entire staff is through an orientation of departmental chairmen. Thus, this one-day session on teaching models and behavioral objectives. Tonight's session will be followed by small group meetings. We trust that you will become involved. We further hope that you will administer the final acid test to them (teaching models and behavioral objectives) in order to determine their reliability, validity and practicality in active classroom situations.

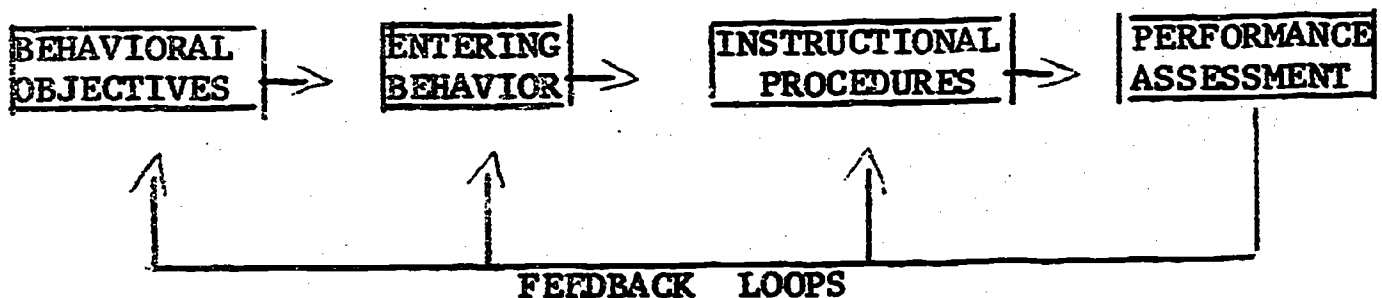
O B J E C T I V E S

At the termination of the inservice program, supervising teachers will:

1. When given a schematic diagram of Glaser's instructional model successfully fill in the boxes without the use of outside aids with 100% accuracy.
2. List with 100% accuracy the three taxonomic domains as identified by Bloom and Krathwohl.
3. List with 100% accuracy the three components of a behavioral objective as described by Mager.
4. When given examples of behavioral verbs, distinguish those words which are open to many interpretations from those which are not open to many interpretations with 80% accuracy.
5. When given examples of objectives distinguish those that are behavioral from those that are non-behavioral with 80% accuracy.
6. When given examples of behavioral objectives categorically identify them as cognitive, affective or psychomotor with 90% accuracy.
7. Write at least one behavioral objective which includes all three components as described by Mager.

T E A C H I N G M O D E L S

Historically there have been many teaching models reported in the literature. Among those reported have been the Socratic Model (Jordan, 1963), the Classical-Humanist Model of the Jesuits (Broudy, 1963), and the Personal Development Model (Combs and Snygg, 1959), A Computer-Based Teaching Model (Stolurow and Davis 1965), A Model for School Learning (Carroll, 1963) and A Basic Teaching Model (Glaser 1962). By far the most simplified and the one that is the most flexible and adaptable to almost any teaching style is Glaser's Basic Teaching Model:



Behavioral objectives are explicit statements of instructional objectives which identify the end product of instruction in terms of observable human accomplishments (or performance), which is the outcome of behavior. To determine whether or not a student has learned something, we observe not his behavior but the outcome of his behavior. We often refer to these end products of instruction as terminal performance.

Entering behavior describes the behaviors the student must have acquired before he can acquire particular new terminal behaviors. More simply, entering behavior describes the present status of the student's knowledge and skill in reference to a future status the teacher wants him to attain. Entering behavior is, therefore, where the instruction must always begin. Terminal behavior is where the instruction concludes. We can describe teaching as getting the student from where he is to where we would like him to be--as moving from entering to terminal behavior.

Instructional Procedures is the third component of the basic teaching model. This component simply describes what methods, activities and considerations will be used to teach skills, concepts, principles, and problem solving. There are several factors which will determine the proper selection or design of instructional procedure. Among these are objectives, entering behavior, needs, interests and abilities of the students, etc.

Performance assessment, the fourth component of the basic teaching model, is nothing more than the use of classroom and standardized test procedures to measure the terminal performance of the students. Performance assessment is intimately related to all four components of the basic teaching model. You assess those performances described in the instructional objectives--the terminal performances. The closest relationship, therefore, lies between the first and fourth components, instructional objectives and performance assessment. Performance assessment, however, is also a major source of feedback on the adequacy with which we have assessed the variations in student entering behavior and on the appropriateness of our instructional procedures and materials.

Secondary student teachers, although familiar with other models, are encouraged to follow Glaser's Model because of the ease with which it can be adapted to any teaching method or style. Such flexibility allows the student teacher to follow the initial pattern that has been set in the classroom by the supervising teacher, and at the same time it assures that the fundamental components of teaching are followed in their logical sequence.

TECHNIQUES IN WRITING BEHAVIORAL OBJECTIVES

Taxonomy:

In recent years educators have concerned themselves with the overt behavior of learners in determining learning outcomes. This has been especially useful to teachers who are attempting to state their instructional objectives in behavioral terms; such learning outcomes can best be described by identifying specific changes in student behavior.

One of the most useful guides in identifying and defining instructional objectives is the Taxonomy of Educational Objectives (Bloom, 1956; Krathwohl, 1964). The taxonomy provides a classification of educational objectives that is analogous to the classification scheme used for plants and animals.

The taxonomy is divided into three parts or DOMAINS:

1. THE COGNITIVE DOMAIN: Emphasizes intellectual outcomes.
 - A. Knowledge
 - B. Comprehension
 - C. Application
 - D. Analysis
 - E. Synthesis
 - F. Evaluation
2. THE AFFECTIVE DOMAIN: Emphasizes feelings and emotions.
 - A. Receiving
 - B. Responding
 - C. Valuing
 - D. Organization
 - E. Characterization by a value or value complex.
3. THE PSYCHOMOTOR DOMAIN: Emphasizes motor skills.

(Category development is not complete)

The major categories in the cognitive and affective domains above identify types of learning outcomes to consider when writing and defining instructional objectives. It should be noted that the categories for classifying objectives in each domain of the taxonomy are arranged in hierarchical order, from the simplest behavioral outcomes to the most complex. For example, the cognitive domain starts with simple knowledge outcomes and then proceeds through the increasingly complex levels of comprehension, application, analysis, synthesis, and evaluation. Each category is assumed to include the behavior at the lower levels. Thus comprehension includes the behavior at the knowledge level, application includes that at both the knowledge and comprehension levels, and so on. The affective domain follows a similar hierarchical pattern.

The psychomotor domain is concerned with motor skills. Although this domain includes some learning outcomes that are common to most subjects (writing, speaking, laboratory skills), it receives major emphasis in commercial subjects, home economics, industrial education, physical education, art, and music. Performance skills play a prominent role in the instructional objectives in these areas. The taxonomic categories for the psychomotor domain have not been completed at this time and we, therefore, not available for this report.

Writing Behavioral Objectives:

Behavioral objectives are statements which describe what students will be able to do after completing a prescribed unit of instruction. They serve two major functions: (1) they help the instructor design and evaluate his own teaching strategy, (2) they communicate the goals and avenues of approach to his students, to other instructors, and to persons planning the entire sequence of instruction for a student in any given area.

Behavioral objectives have three basic components:
(Mager 1962)

1. Terminal behaviors - describes what the learner will be doing when he is demonstrating that he has reached the objective.

Sample: The student will type at least
80 words in one minute.

2. Conditions -- describe the givens or restrictions under which the learner will be expected to demonstrate his competence.

Sample: In classroom situations during timed typing demonstrations.

3. Criteria - describe how the learner will be evaluated. They describe at least the lower limits of acceptable performance.

Sample: With an accuracy of not more than one mistake.

The entire behavioral objective will be:

"In a classroom situation during timed demonstrations the student will type at least 80 words in one minute with an accuracy of not more than one mistake."

In writing behavioral objectives one should avoid words which are open to a wide range of interpretations in considering the terminal behavior of the learner. Consider the following examples of words:

Words open to many
interpretations

To know
To understand
To really understand
To appreciate
To fully appreciate
To grasp the significance of
To enjoy
To believe
To have faith in

Words open to fewer
interpretations

To write
To recite
To identify
To solve
To construct
To list
To compare
To contrast

Main objections to the Behavioral Based approach:

The main objections that most people state when criticizing the Behavioral Objective approach to learning is that the approach can only be applied to simple Cognitive (knowledge) situations, and that when one tries to translate this approach to situations dealing with more complex Cognitive situations as well as Affective (feelings and attitudes), Psychomotor (physical manipulations), and on the job execution that the system is unable to function.

While it is true that simple cognitive situations are easier to obtain and evaluate that does not mean that more complex tasks and those which are affective in nature cannot be incorporated into a Behavioral Objective approach. In fact our final over-all objective is: How well do students perform on the job or during leisure time activities?

Samples of Cognitive, Affective, and Psychomotor behavioral Objectives.

"Cognitive"

Upon completion of the unit, the student will write, in a class setting without the use of aids, a definition of Operant Conditioning which is 100 per cent accurate.

"Affective"

Upon completion of the unit the students will demonstrate their concern for persons in the lower socio-economic groups by voluntarily spending at least two hours per week working in a social service agency.

NOTE: Because of the nature of the Affective Domain, measurement criteria in this area are not usually discussed in advance with the students.

"Psychomotor"

Upon completion of the unit the students will demonstrate their competency by writing ten words on the chalkboard in such a manner that three impartial judges agree that a minimal level of performance has been accomplished.

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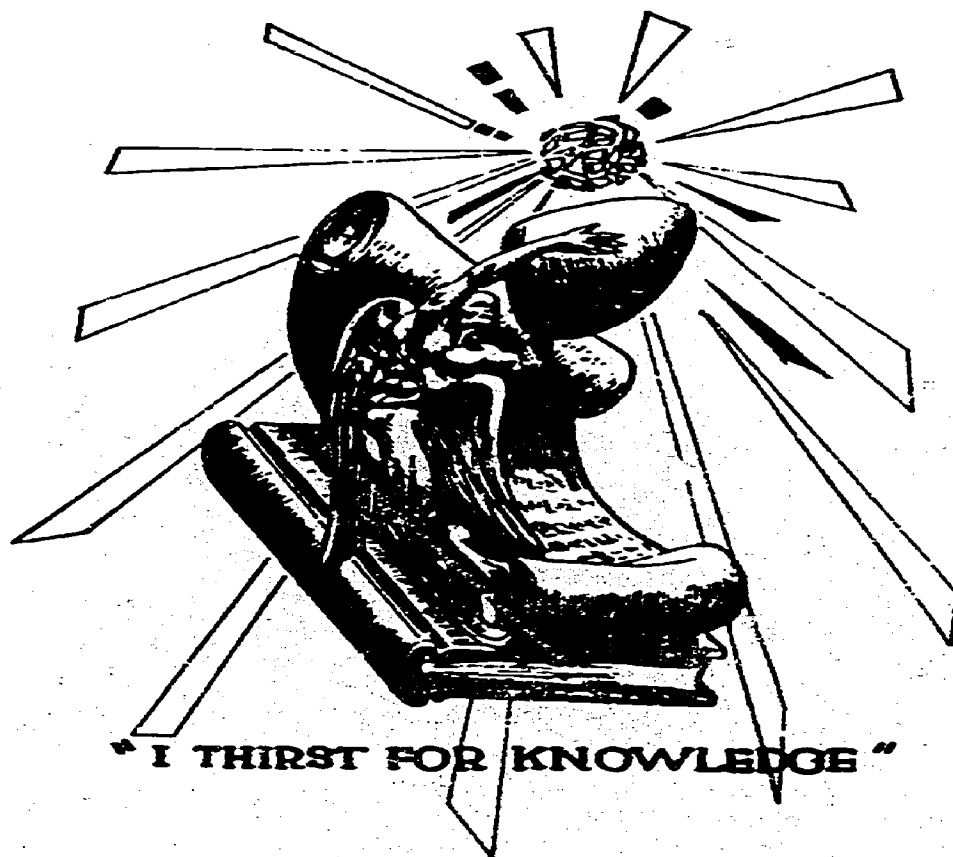
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THE DEPARTMENT OF SECONDARY EDUCATION
In Cooperation With
THE TRAINING OF TRAINERS OF TEACHERS
PROJECT
THE TEACHER CORPS
THE BASIC SKILLS PROGRAM IN LANGUAGE
ARTS
THE BASIC SKILLS PROGRAM IN MATHEMATICS
Presents
A TWO DAY INFORMATIONAL CONFERENCE
ON
INDIVIDUALIZED PERFORMANCE-BASED
TEACHER EDUCATION PROGRAM
(IPT)

Friday and Saturday

March 12-13, 1971

TEXAS SOUTHERN UNIVERSITY AUDITORIUM
MARTIN L. KING HUMANITIES BUILDING



-140-

This is the third in a series of in-house in-service educational programs designed to effectuate change on our campus as it relates to innovative ideas and practices in education. Today's conference is designed specifically to let us take a look-see at what has been done and what is being done in a Teacher Education Program involving some 600 students at Weber State College, Ogden, Utah. This program is completely individualized performed-based. The Presenter is the Director of the program.

The fourth program in this series will revolve around a Systems Management Approach to Education.

We want you to become involved and we do hope that some meaningful dialogue has already started between and among us.

Thanks for sharing this experience with us.

Friday, March 12, 1971

10:00 A.M. — 12:00 Noon

Individual and Small Group Conferences
. HH 301, Materials Center

12:00 — 1:30 P. M. Lunch
Department of Secondary Education Staff (Dutch)

1:30 — 2:30 Open
Campus Visitations

2:30 — 3:30 Meeting
President, Deans, Registrar, and Business Manager

3:30 — 4:30 Meeting
Teacher Education Council

Saturday, March 13, 1971

8:30 – 9:30 Coffee
Foyer, Humanities Building

9:30 – 11:00 First General Session
Launey F. Roberts, Presiding

Greetings Dr. H. Hadley Hartshorn
Vice President, Texas Southern University

Introduction of Presenter Sumpter L. Brooks

Presentation I Mr. Blaine P. Parkinson
Director, Individualized Performance-Based
Teacher Education (IPT)
Weber State College, Ogden, Utah

Questions and Answers

11:00 – 11:30 Coffee Break

11:30 – 1:30

Presentation II Mr. Parkinson

Questions and Answers

Observers – Representatives of
Training of Trainers of Teachers Project
Teacher Corps
Basic Skills Program in Language Arts
Basic Skills Program in Mathematics

Announcements

THE BASIC STUDIES PROGRAM IN MATHEMATICS
in cooperation with
THE TEACHER CORPS
THE BASIC STUDIES PROGRAM IN LANGUAGE ARTS
and
THE TRAINING OF TRAINERS OF TEACHERS PROGRAM
of
TEXAS SOUTHERN UNIVERSITY

Presents

A TWO-DAY IN-SERVICE PROFESSIONAL GROWTH CONFERENCE
on
"SYSTEMS APPROACH TO CURRICULUM IMPROVEMENT"

WEDNESDAY and THURSDAY
APRIL 14 - 15
1971

— AUDITORIUM —

MARTIN LUTHER KING HUMANITIES BUILDING

TEXAS SOUTHERN UNIVERSITY
HOUSTON, TEXAS

-143-

This is the fourth and final Professional Growth Conference designed to help us become more aware of the buzz words and phrases which might cause some additional Federal money to flow our way and at the same time to up-date our own knowledge systems about the innovative ideas in education throughout America.

In our efforts to achieve the above goal, we have secretly hoped that you would become involved sufficiently enough to help us in the several projects underway on our campus. We elicit your support and cooperation in our efforts to transfer the innovative ideas in education from the printed page to the on-going instructional process on our campus.

We are eagerly looking forward to another series next school year.

WEDNESDAY, APRIL 14, 1971

8:30 – 9:30 a.m. Coffee
(Foyer, MLK Building)

9:30 – 10:45 a.m. First General Session
Dr. L. L. Clarkson, Presiding

Greetings Dr. Lamore J. Carter
Dean of Faculties
Texas Southern University

Presentation of Conference Consultant Dr. Leon Belcher
Director, Institutional Research
Texas Southern University

SYSTEMS APPROACH TO CURRICULUM IMPROVEMENT

Presentation I Dr. Walt LeBarron

10:45 – 11:00 a.m. Coffee Break

11:00 – 12:00 Second General Session

Presentation I (Continued) Dr. Walt LeBarron

Questions and Answers

Announcements

12:00 – 1:15 p.m. Lunch

1:15 – 2:15 p.m. Small Group Meeting with Mathematics Staff
Texas Southern University
(Closed)

5:00 – 7:30 p.m. Third General Session
(SH 157)

Presentation III Dr. Walt LeBarron
Systems Approach to Curriculum Improvement in Mathematics. (Closed to
all except participants in Basic Studies Mathematics Program and inter-
ested students.)

THURSDAY, APRIL 15, 1971

8:30 – 9:30 a.m. Coffee
(Foyer, MLK Building)

9:30 – 10:45 a.m. Fourth General Session
Dr. Will R. Strong, Presiding

Presentation IV Dr. Walt LeBarron
The Systems Management Component in Federal Projects

10:45 – 11:00 a.m. Coffee Break

11:00 – 12:00 Fifth General Session
(Continuation of Presentation IV)

Questions and Answers

Announcements

12:00 – 1:30 p.m. Lunch

1:30 – 4:30 p.m. Individual Conferences and Small Group Meetings
(HH 301, Materials Center)

NOTES

SECTION IX: SAMPLE MODULES FROM THE DEPARTMENT OF DESIGN
AND INDUSTRY AT SAN FRANCISCO STATE COLLEGE

While project "spin-offs" of various kinds were found in each of the programs, that which was perhaps the most unusual was a series of module clusters developed by the Department of Design and Industry at San Francisco State College. The notions which are incorporated in the modules were due to the influence of the work being accomplished by the Teacher Corps program there. This series of module clusters is clear evidence of the program's influence. The example presented here is Module Cluster 2: Wood Technics.

Module 2-1

Objective: Given appropriate instruction and/or information you should be able to verbally: (1) identify, by accepted name, ten hand tools recommended for use in the elementary schools, and (2) state a major application for each tool described.

Prerequisites: Module Cluster 1.

Preassessment: See below.

Learning Activities:

1. Read chapter 5 in Scobey.
2. Attend class.
3. Read materials distributed in class.
4. Interview with instructors, assistants, or team leader.
5. Review suggested references.

Evaluation: Develop a list of hand tools and complementary equipment necessary for educationally significant industrial arts learning activities on the grade level--preschool through grade six--of your own choosing.

Criterion of Acceptance: Evidence of comprehension through approval of instructor, assistant, or team leader.

Recycle:

1. Review suggested references.

2. Interview with instructor, assistant, or team leader.
3. Student option.

Feedback:

1. Written and verbal inquiries, points of information, constructive comments, directed to instructor, assistant, or team leader.
2. Citation of additional resources and references.
3. Information concerning poast programs of similar content.

Preassessment for Module 2-1: Identify 10 of the 15 hand tools which have been organized by number on the laboratory workbench. Place the proper name of each hand tool next to its appropriate number and list at least one application for each.

- | | |
|-------|--------|
| 1. a. | 9. a. |
| b. | b. |
| 2. a. | 10. a. |
| b. | b. |
| 3. a. | 11. a. |
| b. | b. |
| 4. a. | 12. a. |
| b. | b. |
| 5. a. | 13. a. |
| b. | b. |
| 6. a. | 14. a. |
| b. | b. |
| 7. a. | 15. a. |
| b. | b. |
| 8. a. | |
| b. | |

Module 2-2

Objective: Given appropriate instruction and/or information you should be able to demonstrate a basic proficiency and understanding of the (1) use of basic woodworking tools, (2) concepts of mass production and the interchangeability of parts, and (3) correct safety attitudes, through active participation in the classroom production of silkscreen frames.

Prerequisites: Module 2-1.

Preassessment: See below.

Learning Activities:

1. Attend class.
2. Read materials distributed in class.
3. Practice and develop hand tool skills and knowledge in the following areas--hammering, sawing, drilling, measuring, filing, sanding, planing, clamping, and carving--through the curriculum unit development and construction of two or more learning activities which may be applied to your particular grade level of interest.
4. Consultation with instructor, assistant or team leader.
5. Review suggested references.

Evaluation: Complete stated objectives.

Criterion of Acceptance: Evidence of proficiency and knowledge through completion of stated objectives as approved by instructor, assistant, or team leader.

Recycle:

1. Review suggested references.
2. Individual work experiences with instructor, assistant, or team leader.
3. Student option.

Feedback:

1. Written and verbal inquiries, points of information, and constructive comments, directed to instructor, assistant, or team leader.
2. Citation of additional resources and references.
3. Additions and deletions of suggested list of learning activities.

Preassessment for Module 2-2: Demonstrate your level of basic woodworking tool proficiency and knowledge by performing the following operations on an assigned learning activity.

1. Hammering.
2. Sawing.
3. Drilling.
4. Measuring.
5. Filing.
6. Sanding.
7. Planing.
8. Clamping.
9. Carving.

Module 2-3

Objective: Given appropriate instruction and/or information you should be able to demonstrate your knowledge of various types of wood, their characteristics and applications through stating (either orally or in writing) the (1) common names, (2) directly observable physical characteristics, and (3) modern-day applications of each of seven or more wood samples you have developed as a teaching aid.

Prerequisites: Module Cluster 1.

Preassessment: See below.

Learning Activities:

1. Attend class.
2. Read materials distributed in class.
3. Develop your own set of wood samples for use as a teaching aid in your elementary school classroom.
4. Consultation with instructor, assistant or team leader.
5. Dissect a log as a teaching aid to explain milling operations.
6. Review suggested references.

Evaluation: Complete stated objectives.

Criterion of Acceptance: Approval of instructor, assistant, or team leader.

Recycle:

1. Review of literature.
2. Interview with instructor, assistant, team leader.
3. Student option.

Feedback:

1. Written and verbal inquiries, points of information, constructive comments, directed to instructor, assistant, or team leader.
2. Citation of additional resources and references.

Preassessment for Module 2-3: Identify the following wood types by placing the appropriate identification number of the wood samples, on display in the classroom, next to the correct name. List common uses and physical characteristics of each sample in the space provided.

_____ Redwood
1. Uses:
2. Characteristics:

_____ Pine
1. Uses:
2. Characteristics:

_____ Fir
1. Uses:
2. Characteristics:

_____ Basswood
1. Uses:
2. Characteristics:

_____ Mahogany
1. Uses:
2. Characteristics:

_____ Plywood
1. Uses:
2. Characteristics:

_____ Veneer
1. Uses:
2. Characteristics:

Module 2-4

Objective: Given appropriate instruction and/or information you should be able to demonstrate a basic understanding of the various types of fasteners and their applications by employing them in the construction of silkscreen frames as outlined in module 2-2.

Prerequisites: Modules 2-1 and 2-2.

Preassessment: See below.

Learning Activities:

1. Attend class.
2. Participate in completing objectives, outlined in module 2-2, utilizing nails, glue, screws, dowels, and staples.
3. Read materials distributed in class.
4. Consult with instructor, assistant, or team leader.
5. Review suggested references.

Evaluation: Complete stated objective.

Criterion of Acceptance: Evaluation and approval of instructor, assistant, or team leader.

Recycle:

1. Review literature.
2. Individual work experiences.
3. Student option.

Feedback:

1. Written and verbal inquiries, points of information, constructive comments, directed to instructor, assistant, or team leader.
2. Citation of additional resources and references.

Preassessment for Module 2-4:

1. List five wood fasteners.
 - a.
 - b.
 - c.
 - d.
 - e.
2. Identify the following terms by naming the wood fastener to which they relate.

_____	a. Penny.
_____	b. Flat head.
_____	c. Casing.
_____	d. Plastic resin.
_____	e. Ring shank.
_____	f. Box.
_____	g. Furring.
_____	h. Finish.

Module 2-5

Objective: Given appropriate instruction and/or information you should be able to demonstrate a basic understanding of the use of simple construction materials by designing a curriculum unit and constructing a supporting learning activity incorporating balsawood, cardboard, paper, or chipboard.

Prerequisites: Module 2-1, 2-2, and 2-4.

Preassessment: See below.

Learning Activities:

1. Attend class.
2. Experiment with balsawood, cardboard, paper and chipboard construction techniques.
3. Consult with instructor, assistant, or team leader.
4. Read materials distributed in class.
5. Review suggested references.

Evaluation: Complete stated objectives.

Criterion of Acceptance: Approval of instructor, assistant, or team leader.

Recycle:

1. Review literature.
2. Individual work experiences.
3. Student option.

Feedback:

1. Written and verbal inquiries, points of information, constructive comments, directed to instructor, assistant, or team leader.
2. Citation of additional resources and references.

Preassessment for Module 2-5:

1. Define the following terms:
 - a. Modular construction:
 - b. Model construction:

- c. Origami:
- 2. List at least two learning activity applications for the following materials:
 - a. Balsa wood:
 - b. Cardboard:
 - c. Paper:
 - d. Chipboard:

Module 2-6

Objective: Given appropriate instruction and/or information you should be able to develop an appreciation of the woods--or lumbering industry--its importance and effect on our society.

Prerequisites: Module 2-3.

Preassessment: See below.

Learning Activities:

1. Attend class.
2. Develop instructional units from those of your own design.
3. Consult with instructor, assistant, or team leader.
4. Read materials distributed in class.
5. Review suggested references.

Evaluation: Develop at least one comprehensive teaching aid from the list of suggested activities or from one of your own design.

Criterion of Acceptance: Approval of instructor, assistant, or team leader.

Recycle:

1. Review literature.
2. Individual work experiences.
3. Consult with instructor, assistant, or team leader.
4. Student option.

Feedback:

1. Written and verbal inquiries, points of information, and constructive comments, directed to instructor, assistant, or team leader.
2. Citation of additional resources and references.
3. Additions and deletions to suggest list of activities.

Preassessment for Module 2-6

1. List twenty (20) items you come into contact with almost everyday which are made from wood or wood by-products.

a.	k.
b.	l.
c.	m.
d.	n.
e.	o.
f.	p.
g.	q.
h.	r.
i.	s.
j.	t.
2. Trace a section of wood from forest to neighborhood lumberyard describing the processing it undergoes from living tree to finished lumber.
3. List the steps involved in paper production.

SECTION X: DESCRIPTIONS OF THE ROLE OF THE PROGRAM DEVELOPMENT SPECIALIST

The section which follows contains four descriptions of the role of the program development specialist. Each of the seven program development specialists did develop position papers regarding their role as they perceived it. The four presented here were selected from those because each places emphasis on a somewhat different configuration of functions. The first was written by Dr. T. Lee Napier, program development specialist in the Jackson State College program. The second was written by Dr. Robert L. Arends, program development specialist in the State University College at Buffalo program. The third was written by Dr. Norman D. Ehresman, program development specialist in the Western Kentucky University program. And the last was written by Dr. Burton Grover, program development specialist in the Western Washington State College program.

Jackson State College

Staff Development. The primary responsibility of the program development specialist here at Jackson State College is to assist the faculties of Teacher Corps to restructure their instructional methods and materials to meet the criteria for competency-based instruction. That is--to use behavioral objectives written in terms of student performance and to develop evaluation instruments congruent with and capable of measuring these performances. To assure relevancy of the instructional program, the program development specialist also provides the faculty with data on the interns' experience, both academic and practical. In addition to these duties the program development specialist acts as a liaison person to assist the faculty in working closely with local school personnel such as supervisors. The supervisors are knowledgeable about the programs in the target schools, both in their special subject areas and in other areas as well.

Duties as an Instructor. As an instructor, the program development specialist at Jackson State College will be the team leader in a two-member teaching team for the experimental component. This component will include elementary statistics and educational research which is to be taught the first five weeks of the 1971 summer term.

Development of Materials. The program development specialist works closely with the faculty members to assist them in the actual writing of the specifications for the modules. In order to further assist the faculty members, they are provided with completed modules to use as guides as well as materials from other teacher education models (Syracuse, Georgia, and so forth). The program development specialist assists the faculty in any

way possible, even to the point of finding some one to type and arrange materials for distribution to the interns.

Collection and Use of Resources. In addition to the resources already mentioned, human resources are utilized whenever possible. Here at Jackson State College the county curriculum supervisors give demonstrations of teaching skills in the college classroom. They also provide a source to obtain information about methodologies and materials presently in use in the target schools. In addition to the supervisors and other persons in the local school system, where it is possible, consultants from various areas are recruited.

Data Gathering and Research. The program development specialist is working closely with the national coordinator to assess the possible effects that the Teacher Corps Program has on the interns as to how the interns evaluate the instructional methodology used, both ideally and as it is in our program. In addition, data are being collected in an attempt to assess the academic achievement of the children in the target schools. Data are also collected for the director, associate director, and faculty members whenever it is requested and it is possible to collect it.

State University College at Buffalo

Staff Development. The most important and enduring role of the Program Development Specialist is in the area of Staff Development. At the same time, it is also the most difficult and demanding of the roles.

The relative difficulty and probable success of working with staff is of course dependent upon their previous knowledge of a competency-based program, and upon the flexibility in attitude and philosophy of education espoused by the various faculty members.

The role actually has somewhat distinct and separate tasks at three different levels. First, is the orientation and instruction of course instructors assigned to Teacher Corps. Second, cooperation and developmental instruction of the LEA Team-Leaders, co-ordinators, and adjunct personnel. Third, to involve the general college instructors who are not assigned to Teacher Corps. The problems and anticipated results of the above actions are quite different. Each will be described separately here.

The task of assisting the specific Teacher Corps instructors is of course again dependent upon the philosophy of the individual instructors. It is also contingent upon the time that they are given to develop the module clusters.

The specific problems of the first year at Buffalo State has been that many of those instructors assigned by the Division of Education to the project have not had an internal commitment both philosophically and professionally to a competency-based program. Nor, in many cases have they had the time necessary for development of module clusters in those cases where the commitment did exist.

In spite of the above pessimism, progress is being made with these instructors, and it is expected that some definite module clusters will be forthcoming in the near future. Actually some of the instructors are using a competency-based approach in their on-going classes. This is especially true in the area of Language Arts. Unfortunately to this date they have not been able to organize their material in such a way that it can be easily exported. Most of the instructors are not willing to write module clusters until they have had the chance to field test some of their ideas.

The LEA personnel on the other hand have been quite receptive to the idea of competency-based module clusters. Several have been developed at this point and field tested to a degree this past summer. It has been felt up to this point that the LEA personnel should not infringe upon the territory usually reserved for the college faculty. However, as time passes it has been decided to concentrate in each area of the curriculum until suitable module clusters have been developed by the Team Leaders in conjunction with the Program Development Specialist. The first area in which we are going to concentrate is the Teaching of Mathematics. This is possible because as of now there are no plans for a more formal approach to this subject.

One of the problems in working with the Team Leaders has been lack of time on their part to meet for the purpose of developing the module clusters. This is in part due to their perceptions of the role of Team Leader which is based upon the more traditional role as carried out during the proceeding years.

The final area of staff development, that of working with persons not directly involved in Teacher Corps, is probably the most difficult in most respects because it is entirely voluntary on the part of those instructors who are not assigned to the project. We have brought a number of outside personnel to the campus to introduce the concepts to the Division of Education, including such persons as:

Will Weber, Syracuse University.
Norm Dodl, Florida State University.
Vere DeVault, University of Wisconsin.
Robert Houston, University of Houston.
Del Schalock, Teaching Research.
Vince Gazetta, New York State Education Department.
Ted Andrews, New York State Education Department.
Herb Hite, Western Washington State College.

While the above people were well received and did an excellent job in their presentations, and interaction sessions, the production in actual module clusters has been very slight except for a special section of the faculty. There have been some follow up inquiries from various individuals, and both the Director and Staff Developer have met with some departments to further explain and clarify the concept and process.

The one exception at Buffalo State has been a small faculty group which is involved in an undergraduate program in competency-based education. This group is committed for the most part to the concept and has been most

productive in the writing and implementation of competency-based module clusters. This project has been under the direction of the Staff Developer which has co-ordinated nicely with the Teacher Corps concept of competency-based teacher education.

Instruction. Ideally the Program Development Specialist should be involved in the instructional program of the college at both the formal and informal level. Informally the Program Development Specialist can act as an instructor on call. He can be of service to the professional staff in the project with regard to presenting the competency-based approach to the interns, and other interested parties. He can also act as a special consultant to other instructors on campus who wish to expose their students to the competency-based approach.

It would probably be highly desirable to have the Program Development Specialist assigned to at least one on-campus class. He can then demonstrate the construction and implementation of a competency-based modular cluster in an on-going situation. His class could conceivably be a model of the competency-based approach.

Unfortunately, from a formal instructional standpoint, the Staff Development Specialist at Buffalo was not assigned a class at the formal level. This is unfortunate in the sense that those positive aspects as defined above were not forthcoming. In our case however, the benefits of the Program Development Specialist working as co-director of the parallel undergraduate program which is also committed to a competency-based program has resulted in a greater number of module clusters being developed and implemented.

Developer of Instructional Materials, and Module Cluster Design. The role of the Program Development Specialist as the developer of instructional materials and as a resource person to developers of modules and module clusters is closely allied to the role of Staff Development.

At Buffalo we first developed a "Handbook" for distribution to faculty members. The purpose of the handbook was to give the faculty insight into a competency-based program, and an outline for the development of the modules. We also felt that with a single style, and a co-ordinated reference system we could achieve a degree of uniformity which is desirable if module clusters are to be exchanged at both the inter-university and intra-university levels. We have been pleased at the reception which the "Handbook" has received both at Buffalo and at other institutions. Dr. Will Weber of Syracuse joined in our final effort and this resulted in at least two Universities following the same style and reference system.

A great deal of effort was spent by the Program Development Specialist in the development of module clusters for the undergraduate program cited above, and resulted in a number of clusters being developed and field tested in the project.

Resource Materials. The role of Program Development Specialist advocates the gathering and use of resources to the extent that appropriate resources are available at the present time. Unfortunately, there is not a great deal

of material available at this time that can readily be transferred from one situation to another, even with major revisions. As new material is generated by the various colleges-and universities interested in this approach to teacher education this role will undoubtedly expand. The materials which we have found helpful are enumerated in a later section of this report.

Research. The role of the Program Development Specialist in this area has been very limited up to this point. The research that is taking place is being done off-campus and the only task here is to administer the test, gather them and send them to Syracuse. There will be little hard research in competency-based teacher education until there is a greater effort made to more material generated and implemented. This role will undoubtedly expand as the implementation of competency-based education is increased.

Western Kentucky University

The responsibility of program development specialist within the fifth cycle teacher corps program at Western Kentucky University rests with the Director of Educational Research. Within the Office of Educational Research, two graduate research assistants are assigned to the TC-NCERD project. This description is a synthesis of the duties of both the program development specialist and the graduate research assistants.

The primary function is in the area of ascertaining the effectiveness of the Teacher Corps program in developing and implementing competency-based teacher education. A secondary mission is to assist the Teacher Corps staff in the development of competency-based teacher education.

Neither the program development specialist nor the graduate assistants serve in the capacity of instructor in the Teacher Corps program.

Activities in the area of staff development revolve around the collection and dissemination of information related to competency-based teacher education. Materials which are deemed useful to the staff in furthering their knowledge about competency-based teacher education and which can provide assistance in developing modules are sought out and discussed with staff members. Sample modules and materials dealing with the development of modules have been collected from other Teacher Corps projects and have been utilized in the development of modules by the Teacher Corps instructional staff. The program development specialist is not assigned the task of developing modules; however, assistance is provided in this area.

The major emphasis of the program development specialist is in designing and conducting a data collection process in order to ascertain the effectiveness of the competency-based program. One phase of the project included writing physical and socio-economic descriptions of the six schools and four school districts that are participating in the Western Kentucky University Teacher Corps program. Another phase included conducting personal interviews with each intern regarding the effectiveness of the competency-based teacher education program. The effectiveness was ascertained by

interviewing interns regarding their attitudes about the program of teacher education that was developed for them, and their attitudes regarding the application of competency-based education. The data collected, when processed, were utilized in an information feedback to the staff of the Teacher Corps at Western Kentucky University. A total of sixty-six intern interviews have been conducted to date; and in addition, school administrators and team leaders have been consulted regarding the influence of the program. Data analysis and report writing as well as conducting interviews represent a large part of the work load of the program development specialist.

Participation in local and National conferences and meetings represents another sizable portion of the program development specialist's work load. These conferences deal with competency-based teacher education and serve as sources of information which can be used by the instructional staff. Local conferences have dealt with the application of the concepts of competency-based teacher education.

As competency-based teacher education becomes more widespread among the faculty of the College of Education it will require additional time and effort for the program development specialist to monitor the influence of the teacher corps project on the faculty and programs.

Western Washington State College

Graduate Program Planning. The program development specialist has helped the Project Director find ways in which the new, field-centered Teacher Corps program can fit into the college's not-always-flexible graduate program apparatus. For example, the latest plan for awarding of necessary grades and credits for M. Ed. submitted to Departmental Graduate Committee was developed jointly by Project Director and program development specialist. Program development specialist coordinated this proposal with faculty of specific M. Ed. program.

College Communication. The program development specialist has been increasing the awareness and involvement of the college faculty and administrators in the Teacher Corps program with an aim of encouraging the rest of the teacher education to adopt desirable training features of Teacher Corps. For example, the program development specialist has arranged distribution of Teacher Corps reports within the Department, and has arranged for attendance and participation of key faculty at local Teacher Corps committee meetings (local committees are the key element of program in its present state).

Teaching. The program development specialist has been directly involved in teaching of interns. The program development specialist taught a graduate credit course in educational research to interns and promoted modification of course to better suit needs of interns.

Assessment of Priorities. The program development specialist has, through communication with Washington, D. C., Syracuse, Monmouth, Oregon, and locally, been gathering information for a general contextual picture of varying perceptions of priorities and expectations for Teacher Corps. The program development specialist has devised and tried out a modified Q-sort questionnaire now in the process of

being administered to diverse groups (graduate faculty, community representatives, for instance) locally on relative priorities of the program. Data to be interpreted and summarized later. Substantial need for this information perceived by program development specialist.

Instructional Modules. The program development specialist has arranged for identification and procurement of modules developed outside of Western Washington State College, disseminated Western Washington State College modules elsewhere, arranged identification of needed supplementary materials and facilities, and supervised production of new modules. The program development specialist is currently managing and supervising a project which will produce 15-18 field-tested modules by June 15--modules which will be available to Teacher Corps and other teacher education programs locally and nationally.

Field Work. The program development specialist is engaged in direct observation and conferencing with interns, team leaders, administrators, and cooperating teachers in the field. Demonstrated intern competencies are to be part of graduate program evaluation. At the present time the program development specialist is working exclusively with one of the four district teams in the project (Mt. Baker School District).

Systematic Management. The program development specialist has responsibility for the planning and description of the management of the program. The systematic management design submitted last fall to Teacher Corps Washington was written by the program development specialist.

Program Evaluation. The program development specialist has assisted evaluators in discerning formative evaluation needs, adjusting evaluation directions to changing program emphases, devising instruments, and devising evaluation paradigms. The program development specialist has played the biggest role in deciding what questionnaires are to be administered when and to whom as well as doing a good share of the work in devising three or four out of seven questionnaires used so far. The information to be used mostly for formative evaluation and management decisions.

Communication of Evaluation Information. The program development specialist has helped summarize, interpreted, and communicated information gathered for evaluation purposes to local staff and to national office. Recent informal report on evaluation sent to OE's NCERD was written by program development specialist.

Participation in Decision-Making. Decision making is very broad-based in the Western Washington State College program. The program development specialist has participated in innumerable meetings of college staff, team leaders, interns, and local committees.

Coordination of Technical Assistance. The program development specialist has planned the Western Washington State College's use of technical assistance available through Teaching Research, Monmouth, Oregon. The program development specialist has identified the need for and requested three days of technical assistance to observe, judge,

and report interns' present level and repertoire of competencies in two school districts of the Western Washington State College program.

Additional Information Gathering. The program development specialist has gathered information directly by interviewing several participants about the progress and status of the program and has communicated findings to staff and evaluators.

SECTION XI: INTERN PERCEPTIONS REGARDING COMPETENCY-BASED TEACHER EDUCATION

The following section reports the results obtained from several efforts to examine intern perceptions. The major focus of those efforts was on their perceptions of competency-based teacher education. Data were also obtained relevant to their perceptions of traditional teacher education programs, their own program, teaching, and low-income, minority persons. In addition to data which was collected as a part of the project reported here, brief summaries of studies conducted at Jackson State College and Western Kentucky University are also presented.

Intern Comments

The following are excerpted comments which were obtained from interns from each of the seven programs involved in the project. Three sets of comments are included here:

1. Excerpts of comments obtained from interns just prior to or during the very beginning of preservice training. Comments were made in response to the following directions: "Using the space below and the back of this sheet, if necessary, please describe your perceptions of the new trends in teacher education and competency-based teacher education. Please be just as frank as possible regarding your feelings."
2. Excerpts of comments obtained from interns after preservice training but prior to inservice training. Comments were made in response to the following directions: "Using the space below and the back of this sheet, if necessary, please describe your feelings about the experiences you have had thus far in Teacher Corps. Please pay particular attention to: (1) your feelings about the competency-based aspects of the program you have experienced, and (2) your feelings about the program as a whole in light of your expectations prior to becoming an intern."
3. Excerpts of comments obtained from interns very near the end of the first year of inservice training. Comments were made in response to the following directions: "Using the space below and the back of this sheet, if necessary, please describe your feelings about the experiences you have had thus far in Teacher Corps. Please pay particular attention to: (1) your feelings about the competency-based aspects of the program you have experienced, (2) your feelings about the program as a whole in light of your expectations prior to becoming an intern, and (3) particular problem areas you feel to be important."

The excerpted comments which follow are identified as to the intern and his program. The first digit of a code number indicates the program; the two digits which follow indicate the intern. With regard to institutional identification, the following code was used:

1. Jackson State College.
2. Oakland University.
3. San Francisco State College.
4. State University College at Buffalo.
5. Texas Southern University.
6. Western Kentucky University.
7. Western Washington State College.

In addition, comments are identified as to when they were made by a number in parenthesis following the three digit institution-intern identification; (1) refers to pre-service responses; (2) refers to post-preservice responses; and (3) refers to post-inservice responses. In those cases where an intern did not respond to an item or did not--for whatever reason--fill out a questionnaire, no listing is included. It is the belief of the writer that the excerpting process has not distorted the intent of intern comments.

101(1). "I think that the competency-based program will be better than the traditional program because . . . the teachers will be spending more time with the students and this will enable the teacher to understand the students more . . . and students learn more moving at their own rate of progress instead of just moving along, regardless of progress."

101(2). "Competency-based instruction benefits the student more than the traditional method because students learn more from it than the traditional program."

101(3). "I like the competency-based program and I think kids will benefit more from it than a traditional program."

102(1). "I am not sure I fully understand what competency-based teacher education is all about . . . it is to see how well the pupil is learning as you teach."

102(2). "The competency-based education was not what I thought it to be; it was too hurried. I guess it was due to the fact that we had six weeks to cover our specifications. It has been an interesting program but I'm slightly displeased. I think it will be more interesting in the weeks to come."

103(1). "The trends . . . seem to be ideal. More could be accomplished and each child would be looked on as an individual who had talents rather than impossible to teach. I cannot give an intelligent answer until I know more about the program."

103(2). "I feel that the competency-based learning method is superior to the traditional method . . . there is no question as to what is expected of the student and this makes performance much easier."

104(1). "I think the new trend . . . is great . . . it is difficult for one teacher to meet the demands of a classroom all day. . . . more emphasis should be focused on the deprived child . . . so he can become a better individual."

104(2). "The competency-based aspects are great. I plan to continue as an intern in the program."

104(3). "My experience has been fine so far; however, I've had minor problems that have worked out. I have enjoyed working in the schools and am looking forward to a successful year."

105(1). "Competency-based education has greatly improved the teaching situation where students are given individual attention, which is long overdue. The student is able to proceed at his own rate which can be a self-motivating process. . . . It shows how to teach subject matter rather than possess knowledge of subject matter."

105(2). "Competency-based instruction has been a rewarding experience. It is a great improvement over the traditional method. This program has exceeded my expectations."

105(3). "Competency-based instruction has given me the independency that each student deserves. It has fulfilled my expectations. The problem is time--there isn't enough in the quarter system to cover the materials sufficiently."

106(1). "These innovations are practical . . . most interesting however is that of multi-dimensional patterns of organization. . . . When speaking of competencies . . . one should think of all aspects of maturity and growth of the child. . . . It is good that heavy emphasis has been placed on criteria of knowledge, performance, and product."

106(2). "I feel that the program as a whole is ideal. I am in favor of the competency-based aspects as long as it is presented as it should be."

107(1). "The new trends are idealistic in their goals . . . there are going to be gross adjustments . . . made at grade levels and higher ones. . . . if there is no adjustment with lower grades I see little hope of usefulness of this competency-based program. There is the question of use in present systems. The teachers . . . would need to be re-oriented . . . which would take a long time."

107(2). "Competency-based learning . . . requires a lot of memory effort but seems to work well. It covers a special amount of material in the time allowed and can be geared to long term retention."

107(3). "I like competency-based instruction. For the first time I am able to work at a rate that makes me feel secure in knowing I have learned up to my capacity. . . . The limits are few with this type of instruction. The main problems are those of individual adjustment--acceptance of competency-based instruction and independence of mind."

108(1). "This program is an avenue through which boys and girls can better perform. . . . In a traditional approach, pupils are taught on the same level . . . there are a great number who are not reached. . . . competency-based programs could minimize this."

108(2). "In this type program you know what your objectives are, because they are spelled out to you and you have to work to reach these goals. Overall I feel the program is something that has long been needed in our educational system."

108(3). "I feel that competency-based programs are good because you know the specifics on which you will be graded."

109(1). "Trends are in an experimental stage. My understanding is limited but I think trends such as utilization of the new technology and differentiated staffing are good. . . . I think some trends are good and certainly should be thoroughly tested."

109(2). "I have experienced some success and some frustration in the program. The competency-based program is effective but I don't like receiving specifications in one class and being tested the following period . . . this involves rote memory. . . . Competency-based specifications spell out exactly what is to be done and it cuts down on uncertainty."

109(3). "Competency-based aspects of the program have not been carried out by all instructors. One was effective; the others rate from average to poor. The seminar needed to be related to what we were doing. I see the seminar as the weakest area of the program. Emphasis was placed on amount of time, not quality of work. I think ideal competency-based teaching has many advantages."

110(1). " . . . competency-based teacher education allows for more knowledge . . . a student is allowed to achieve at his own rate or speed and more apt to retain what he has learned. This . . . is not the case . . . in a traditional program where concern is on length of time to complete a course rather than accuracy and full benefit of that course."

110(2). "My complaints regarding competency-based aspect of the program is teachers may not have been as familiar with it as I had assumed. Therefore, we were introduced to more memorization and less retention of knowledge."

111(1). "New trends . . . and competency-based teacher education might draw more high school graduates toward education. . . . We need to establish more programs which emphasize the importance of the student being responsible for his own learning through independent study, self-pacing, etc. I think the idea of putting more emphasis on the use of performance is going to be effective."

111(2). "I think this summer experience with competency-based aspects was not totally effective--the reasons are short experience and time did not allow full treatment of all aspects of the program. I hope from what I have seen (films, talks, experience) that the program will be a success."

112(1). "Competency-based teacher education . . . is a good approach toward reaching the individual needs of children. Interns will allow more time for meeting individual differences . . . interns will have the opportunity to develop competencies in areas of specialization. . . . an individual can learn at his own rate . . . and is helped according to individual interests. When a student has been taught according to his own interests . . . it will help him to be a human being with dignity and a good education."

112(2). "I feel that Teacher Corps for the pre-service has been effective although I know it was not as effective as it was supposed to be. I do feel that it will be so in the future as more work is put into it."

112(3). "Competency-based technique is a good one. Students seem to accomplish more. It should be used by all instructors. Problems consisted of controlling the group and discipline."

113(1). "Competency-based teacher education is needed. . . . A student should be able to progress at his rate of speed."

114(1). "The new trend . . . has its advantages over the old methods because it gives the student an opportunity to work at his own speed instead of the instructor's speed."

114(2). "Competency-based Teacher Corps programs are quite rewarding. It gives concrete methods and materials to work with; so with effort, you cannot fail."

114(3). "The competency-based aspects of this program are good. I feel all instructors should try to make their courses competency-based."

115(1). "Competency-based programs may be what is needed in acquiring an education. It allows the student educator to invest greater time in helping pupil progress rather than have the same lesson plan for nine months. . . . Kids today need a program that holds their interest in school and . . . helps them learn at their rate of speed. A competency-based program is worth a try."

115(2). "Competency-based aspects of the program . . . have not been very encouraging as I've found myself doing the same things I did under the traditional approach. I memorized a lot of material . . . I hope the fall program will be different so I will be able to understand this new approach. The program did not come up to the expectations I had. I thought I would be taught a method which would help me in working with pupils."

115(3). "The competency-based aspect of the program was very good. I was more confident when taking a test and a little more relaxed. I could prepare myself better because I knew what to expect. The biggest problem is . . . with administration and school faculty. They were ignorant of the program. There should be a better orientation of the school faculties in the future about competency-based education and the purposes of the Teacher Corps program itself."

116(1). "With the advancement of new techniques, competency-based teacher education can provide flexibility and new attitudes can be introduced. It provides a new outlet for social, emotional, and physical growth for children."

116(2). "The pre-service training in competency-based instruction was good. The six week program did not prepare me as a beginning intern. I didn't acquire any new skills that will help me with students."

116(3). "I like the competency-based program. It has helped me in many ways. I have learned more and it removes tension in my work."

117(1). "I feel that one does not retain information from compulsory courses which are of no interest. One should be allowed to choose things of interest to him. I wonder about incentives that would be used to inspire pupils who will not take initiative in any area."

117(2). "My feelings . . . are negative. I have gained little insight into handling a classroom situation for children. My opinion about competency-based classes I attended this summer is also negative. I memorized the objectives . . . and learned little or nothing."

118(1). "New trends are . . . working toward improved methods and techniques to help children. Such programs such as Teacher Corps prove that competency-based teacher education is the best approach . . . and will be initiated in teacher education programs."

118(2). "I have been impressed with the competency-based method of instruction. I prefer it; however, the classes did not meet enough to put into practice some of the things learned. My expectations are in line with what I thought the program was intended to do."

118(3). "I have been impressed with the structure and goals of competency-based education. I feel I have been better prepared in the classes that I have taken in competency-based education. Most of my expectations have been fulfilled after a year; however, more emphasis should be placed on individual responsibility and desired results."

119(1). "New trends in teacher education will benefit students (poor, minority, etc.) because it is a change for the better. Some students have had limited experiences and need special attention. These people don't create the situations where they live nor do they avoid educational opportunities . . . opportunities are limited and teachers need help. New trends such as competency-based education are essential. . . ."

120(1). "As I see competency-based teaching it is a program where students are not placed at levels . . . and I feel that the idea of non-grouping is wonderful . . . and it could promote interest on the part of the student."

120(2). "My experiences with Teacher Corps have been interesting. Instruction has not been completely competency-based. At first it was but I later realized that you never get a chance to be creative. Reliance upon memorization is too great."

120(3). "The competency-based program . . . gives a person a chance to work to his capacity without being pushed. You start where you are and move on without prompting from others."

121(1). " . . . Competency-based teacher education is more concerned with the actual progress of the child . . . emphasis is placed on the child's comprehension, the instructor's ability to work with each child as an individual, time element or working at own pace, and developing certain skills and knowledges."

121(2). "Personal experiences with competency-based method have been enlightening and rewarding. This technique has a very positive future when correctly implemented."

121(3). "This past year I have been able to implement the theory of competency-based education. The program is quite different from what I expected. I feel there is a need for better communication for all concerned."

122(1). "New trends are a bright light . . . if they are used. . . . there will be stumbling blocks from traditional approach people. Once change is accepted, whether positive or negative, and all work in a positive approach, programs like these new trends will move more rapidly in our society."

122(2). "The good part is knowing exactly what is required and needed. The bad part is not enough time to put the information to work. The pre-service was either too short or too much material was attempted. The program . . . will make one able to integrate old methods with new creative ones."

122(3). "The competency-based aspect is very good because it does away with lost time. The student knows what is expected; therefore he has the opportunity to prepare himself. . . . I did not expect to take so many exams. . . . I thought Graduate School was less exams and more research. The greatest problem was School Board relations; the question is: will we start where we left off, or will we go through the same hassle again this year?"

123(1). "My perceptions of the new trends in teacher education . . . are that time is not important but the mastery of specific objectives is important."

124(1). "I infer that competency-based teacher education is concerned with achievement, not time. Time is important . . . but I would rather make my students aware of a few things than confuse them with a lot of things."

124(2). "The past five weeks has not been what I wanted. There are few things I have retained . . . but I have them written in my notebook. Before the program I did not expect to keep the knowledge in my notebook."

124(3). "It seems like we have an idea of direction but not a sense of direction. Things never turn out the way that I expect them to. It could be that I infer the wrong things about what I'm told."

125(1). "My opinion of the new trends . . . in education is one of impressiveness since there is a tendency to keep this system relevant to the times and to the people who are involved--both interns and school children."

125(2). "I tend to believe that the ideal methods will work for small children, but there may be some restrictions for older ones."

126(1). "The new trends in teacher education and competency-based teacher education will become an important part of our educational system. . . . This is a change that has been overdue. I don't believe that every part of the program will work as well as others . . . no program is entirely good without some pitfalls. Overall I believe this education program can be successful if we as Teacher Corps Interns strive for perfection."

126(2). "I feel that competency programs are workable but as with all new programs and ideas it could use improvement."

126(3). "I have been exposed to a great experience through Teacher Corps and competency-based education. The more contact with it, the more I see its helpfulness. My only problem would be knowing more about carrying through . . . a guideline is needed."

127(1). "Competency-based teaching, if effectively followed through, could prove to be a major breakthrough in our educational system. Unlike the traditional approach . . . each pupil will be able to develop his potential to the fullest. The slow student could move at his own rate of speed without feeling inferior."

127(2). "Even though pre-service training is completed, I feel I haven't had sufficient practice working with competency-based programs because of deficiencies in our total program."

127(3). "The competency-based instruction can become more effective if we were allowed to utilize it in the classroom with pupils."

128(1). "I think the effectiveness of students and teachers can be better observed through the new trends in teacher education. It provides person-to-person contact between students and teachers and serves as a means of easier communication."

128(2). "The classes, with the exception of one, didn't prepare me for work in the classroom. Otherwise I have no complaints."

128(3). "When I first began Teacher Corps it was the greatest thing going but now, however, I have a different opinion. The program is O.K. as far as it goes, but that's all."

129(1). "The new trend in competency-based education should prove more effective than teacher training now employed. The student will be closer to the faculty who is able to meet his special needs and he will be able to comprehend more."

129(2). "The competency-based aspect of the program is more appropriate than the traditional educational program. One knows that

at the end of a particular specification he has learned something rather than memorized it."

129(3). "At first competency-based programs seemed ideal, but they failed in implementation in the classroom. This was due to the use of traditional methods of teaching. The main reason---people in charge didn't push competency-based education."

130(1). "The new trends . . . seem to give credence to the idea that education can be exciting and relevant. With situations that allow a student to proceed at his own pace and . . . equip the instructor with skills and knowledge to guide students, I can see that education becomes relevant rather than a vague goal and idea."

130(2). "Competency-based has been a memorization program . . . with no room for learning experiences, creativity, or originality. . . ."

131(1). "In hearing about competency-based teacher education, I think flexibility is the most exciting part of the program. The student is allowed to progress at his own rate along with independent study . . . and is able to relate outside experiences with classroom activities which are things relevant in our society."

131(2). "Competency-based instruction . . . is one innovation that . . . puts one on his own. He can work at his own rate of speed and be successful. I feel that this is one of the best ways of securing success and a feeling of learning."

132(1). "I think the new trend is really the thing to help children get a basic foundation in education. I hold a high opinion of this competency-based teacher education."

132(3). "I think the competency-based system is good. The program as a whole has not met all of my expectations but many of them have been."

133(1). "These new ideas will place less strain on one individual teacher by giving her more time to spend with each child . . . also a child is exposed to specialists in their fields. He gets the benefit of in-depth study of subject matter. By individualizing, the child should get a feeling of being loved and this should make him want to do more."

133(3). "I have not experienced any team teaching. But as a whole the program has been rewarding and fulfilling."

134(1). "Competency-based teacher education seems to be a worthwhile innovation that can help achieve more relevancy in education."

134(2). "Competency-based method is too rigid and centered around memorization. The course content is good for preparation for future endeavors in Teacher Corps."

134(3). "The work done in the field has been too traditional in terms of methods used. Competency-based aspects of this program are improving as compared to the earlier part of the program."

135(1). "I have felt that prospective teachers should get more practice before they become a teacher. The competency-based teacher education program is the answer to a prayer."

135(2). "I have positive feelings about Teacher Corps and competency-based instruction. It has one drawback thus far-- memorization. I feel the program has been successful. I haven't ever attended classes where teachers were more devoted to their students."

135(3). "I had high hopes in the competency-based program but the hopes never materialized."

201(1). "The new trends in education are exactly what is needed because they are more relevant to a situation than a set of ideals or principles."

202(1). "I feel the 'liberal arts' cannot be treated fairly because of its requirement to state objectives concretely. By restricting the student's goals to 'achievement,' you ignore the student's whole development. I disapprove of the inability of this theory to adjust its scientific approach."

203(1). "Competency-based teacher education is a step in the right direction but I am skeptical of the sincerity and true motives here. The overall goal of education should be to change society and implement innovation in such a way that the society has a future--that it is an open-ended social system rather than a terminal one."

203(2). " . . . the only real solution . . . is the concept of a functioning self-contained classroom with a highly individualized structure and run by a well trained 'teacher' or rather 'facilitator of learning,' styled after the approach being used in progressive British schools. Team teaching . . . is no more progressive than the individual teachers on the team."

204(1). " . . . competency-based program was conceived as an answer to the problem of the disadvantaged or slow learning child. . . . such a program could have a stymie effect on an excessively creative (or brilliant) child due to the way it channels learning."

204(3). "I felt that I learned a great deal. The program is not what I expected; neither did it follow what was stated in the original proposal."

205(1). " . . . during his training, the teacher will be doing just those things that he will be doing after the completion of the program. The new method creates more anxiety for the student, however, because he cannot rely merely on classroom attendance and study of books to get him through the course. . . . more interesting because it uses more facilities and takes place in more settings than just a classroom."

206(1). " . . . quite effective for several reasons. . . .

Student spends more time within the school and among the type of pupils he or she will be teaching. . . . less theoretical material. Competency-based education is based on how well the student digests what he is taught rather than how many courses he takes."

207(1). "I feel a unity must be established between the individual student and the community, which is presented by the teacher. . . . Extra time given where necessary; less time where student demonstrates proficiency"

208(1). "I feel competency-based program is a very good trend. . . . It aids me in finding information about the background of the community and in finding out about some of the problems I will be facing."

209(1). "I am in agreement with the new trends in education. Competency-based teacher education gives each person an opportunity to advance at his own speed and at the same time it gives him time to improve his particular weaknesses."

209(3). "Teacher Corps as a competency-based program is making possible the much needed progress in education. I feel that the program has provided me with more competency as a teacher."

210(1). "It's good because it is moving toward a realization or a sensitivity and appreciation of the child as an individual and leads to stimulation of creativity. . . . Student being more reliant on self rather than on the teacher is good. Student is more motivated if he were not pressured by deadlines."

210(2). "Student is usually affected by the label of that group, but often gets over it after he gets into the subject matter. I would like to see interest centers learning activity conducted outside the classroom. I feel community involvement is a great part of our program."

211(1). "I feel that competency-based education will play an important role in preparing children from disadvantaged educational systems. It is the only fair way to help correct this inferior type of education."

212(1). "The new trends in teacher education allow the student to develop as fully as possible . . . express himself . . . progress at his own rate . . . utilize all of his faculties in his learning process."

213(1). "Competency-based teacher education with its emphasis on the product will provide opportunities for disadvantaged individuals. I understand the trend is that the educator is interested in the post-test results which the learner can demonstrate. I must personally salute this educational effort if it is incorporated in an effective and positive manner."

213(3). "My most immediate concern is the fellow teacher. I feel

that a teacher must love children (child-centered education). The program provides an excellent training basis for the teacher . . . gives an opportunity to get out of the field before he becomes a loose end in education."

214(1). "Due to industry-oriented goals in undergraduate training, I have not experienced any of the 'traditional' education courses. Indications seem to be that this competency-based program will be more realistic and 'humane' with regard to objectives and methods."

214(2). "Exposure has been brief but the initial reaction is one of assent. Renovation of the system is far from complete but any step in this direction, that is toward competency-based evaluations and instruction, is certainly a step in the right direction."

215(1). "The new trends in competency-based teacher education are the most far reaching and hopefully rewarding trends in the area of education today. I feel that the traditional approach must be replaced with a program so designed as to allow for each child's wants and needs."

215(2). "In my particular school, there could be much more guidance and direction on the part of the team leader and master teacher. I view the program as a much better approach to education."

215(3). "I feel that evaluations were too few and too far between to get a critical assessment of our competence as classroom teachers. I had very transient associations with all university instructors. Structure and objectives of Urban Corps are constructive, far-reaching, and innovative, but do not see the vital contribution."

216(1). "It allows for better understanding of environmental factors surrounding the pupils, closer social relationships (teacher-parent), use of more dynamic learning tools, and more freedom for self expression and creativity. . . ."

217(1). "Competency-based teacher education gives student better background in his or her field before entering the classroom . . . student is given a chance to apply the methods he is learning . . . to correct those which don't work . . . chance to receive total classroom experience but with the guidance of an experienced teacher for a total school year. . . ."

218(1). "Opportunity to go at your own pace and learn at your rate is very important. . . ."

219(1). "Competency-based teacher education allows students with various levels of ability to achieve as much as possible. . . . I see problems, however . . . students used to highly structured instructional techniques may well become lazy . . . result in overall loss of efficiency . . . students well grounded on a modular system from first years through graduate level work may hold key to significant increase."

219(2). "Urban Corps has a great deal of potential, but lacks efficiency and seems over-burdened with bureaucracy . . . classes are of questionable relevancy to new teachers . . . morale in our school is low. . . ."

219(3). "In theory, the idea is very good. Observations, only for grading, not for critical evaluation . . . make interns work with children in preservice!"

220(1). "I particularly like the independent aspect of the program that emphasizes flexibility."

221(1). " . . . traditional teacher education presented an unrealistic view . . . very impersonal and little interaction between student and instructor. . . . With competency-based program, student has chance to put realistic views to work at his own pace and in the order he feels they should go."

222(1). "Competency-based teacher education is desirable in situations where future teachers have not had previous teacher education courses. Traditional teacher education can be equally satisfying by using creativity in designing the course--need not be a programmed course."

222(2). "Urban Corps is not coordinated closely enough with what is needed by the intern. . . . My performance has been hampered by a lack of proper support from my master teacher, lack of cooperation from the school, and the absence of good innovative models from among master teachers and group leaders."

222(3). "The competency-based aspects of this program have appeared too late and too disjointed to be of assistance. . . ."

223(1). "I agree with emphasis on performance and product. . . . We have been told that we must be certain of our objectives and have effective criteria . . . these have little relevance to what various objectives could be and what various criteria might include."

224(1). "Competency-based teacher education could be effective experimental method for reaching the goal of obtaining/producing effective teachers . . . stresses performance which is important."

225(1). "Competency-based teacher education allows students to work and learn at their own rate and on things they do not have competent knowledge of when they begin . . . work without time pressure . . . teacher is a supplemental instructional tool."

225(2). "I still feel competency-based teacher education is the best method."

225(3). "I feel a competency-based program has met my needs well . . . has been what I expected . . . a lot of work . . . I feel confident about teaching on my own next year. . . ."

226(3). "I wouldn't have traded my year in Urban Corps for anything; even money. We have been most fortunate to have competent concerned instructors who have gone above the call of duty--a good program. . . ."

227(2). "Competency-based teacher education is the wave of the future. It should take over the whole process of teacher education. . . . Practical experience and intensive classroom exposure is the only way to develop teaching skills."

228(2). "The best way to acquire the ability to teach is to teach and not write papers about teaching. . . ."

229(2). "Competency-based teacher education will be the teacher education program of the future. . . . To get your feet wet with the competency-based program is much more relevant to a future teacher . . . one action in a classroom is worth a dozen textbooks. . . ."

229(3). "Competency-based teacher education fulfills a very definite need in education today."

230(2). "I have found competency-based teacher education worthwhile in both its design and actual functioning. Program is weak in personnel leadership in individual school settings."

230(3). "Great to be in the classroom for a year."

231(2). "I believe the competency-based teacher education is the most appropriate way to train teachers. It eliminates the people who are not the most qualified. The teacher becomes more aware of his or her problems. . . ."

231(3). "Teacher Corps is far from being an innovative agency. It is geared too much toward traditional programs . . . need for better models . . . need more opportunity to observe other styles of teaching."

233(2). " . . . competency-based program seems the best possible education program for teaching in a certain area. . . ."

233(3). "Program was a bit unorganized and forms of competency-based aspects of Corps were limited--overall picture of program was favorable."

235(3). "The whole problem with my experience in Teacher Corps centered on the expectations of my team leader and of the other teachers in the school. Apparently no one had adequately explained the purpose of Teacher Corps to these people. Consequently, at my school, the program was almost entirely traditional."

236(3). "Competency-based aspects can be more effectively implemented if students were grouped as a class in the beginning of the year (according to ability in major subjects and maturity). . . ."

301(1). "Competency-based teacher education places more emphasis on performance and product . . . appreciate the idea of direct experience as a learning process, coupled with directed objectives. . . ."

301(2). "I feel much of the competency-based program has been shadowed by often meaningless busy work which is time consuming and often distracts from on-site learning."

302(1). "Appears to be good but how do you move from module to module; does a test really measure my competency?"

303(1). "Concern and respect for the children of low-income and minority families is long overdue."

303(2). "Competency-based teacher education seems somehow more stimulating to the teacher. The student will probably benefit more than through the old method."

304(1). "I have mixed feelings."

304(2). " . . . only one of our courses is competency-based. The program is a failure--community participation is nil, program is very disorganized."

305(1). "This method could be carried further to be used within the classroom of the public schools. . . ."

305(2). "I would like time for more school and community involvement and devote less time to the college scene."

305(3). "Within the last few months this program has become more innovative and individualized than in the preceding months. However, there are still difficulties in trying to be 'innovative' in a pre-established 'system.' . . . course content is more relevant and enriching. . . ."

306(1). "Competency-based teacher education engenders feelings of worth and a realistic assessment of the student's abilities and interests. . . ."

306(2). " . . . since the competency-based aspect, I have become more logical and more able to deal with the classroom situation. . . ."

307(1). "Competency-based teacher education adapts to the needs and time patterns of each student and will result in revolutionary changes in the educational system all over the country. . . ."

308(1). "Competency-based teacher education can only be successful if one has the community in which he is teaching to back him up . . . must find a way to break down the traditional method first. . . ."

308(2). "We have not had much experience in actual classroom situations. . . . program as a whole is still not very well organized in terms of courses that will be taught and administrative matters."

308(3). " . . . competency-based program has helped me in terms

of writing lesson plans, behavior objectives, and so forth. . . . the most important area of the program is to train us to be good teachers, which the staff has not provided us so far."

309(1). "Allowances are made for the 'slow' learner whose motivation and interests have hitherto been ignored and unattended to. It is important to believe that everyone can be motivated--all one has to do is find the right gimmick."

309(2). "Program is unorganized and does not seem to always follow guidelines. . . . defining doesn't mean one can really do something. . . ."

310(1). "This is my first real introduction and I reserve my opinions until I have seen it working in a classroom. . . ."

310(2). "I like the feeling of achievement that it gives me . . . we often get tied in knots because something gets hung up administratively. . . ."

310(3). "Somehow I don't think we have mastered writing relevant behavioral objectives for ourselves. . . . I went to visit other classrooms and this gave me a great deal of fire and stimulation to try new ideas. . . . I had already been warned that the program would be a hassle; as long as I can become a good teacher in spite of the hassles, I am satisfied. . . . We need to work out more relevant stuff for behavioral objectives, be sure to cover all subject areas, build up a repertoire of things for children to learn with."

311(1). "Competency-based teacher education is more responsive to the needs of the individual child . . . in favor of the constancy of achievement with variation of time and placement of emphasis on competency measurement after instruction. . . ."

311(2). "We need more involvement with children in the schools in the form of observational experiences . . . some aspects lack relevance to prepare me to teach in low income areas. . . . Program is not as organized as I expected."

312(1). "Competency-based teacher education is the only kind of change that will save the educational system in this country, if it is to be saved at all."

312(2). " . . . Some confusion as to the definition of competency-based programs . . . sounds good on paper . . . it is difficult to accept changing rhetoric without experiencing many of the changes. . . ."

312(3). " . . . the longer I am in Teacher Corps the more I am disillusioned. The program is a microcosm of the general problems on every level: (1) irrelevant information, (2) artificial methods of dealing with children, (3) incompetency in direction and leadership, (4) inability to treat students as thoughtful, contributing human beings, (5) breaking contractual agreements, (6) general individualistic, non-community oriented philosophy, and (7) general lack of concern for people as humans."

313(1). " . . . competency-based teacher education is great--we've known about it for a long time--try and implement it in any real way and zap!"

313(2). "The competency-based aspects are great. The problem for me is: our module program requires time, community things requires time, my on-site school observing takes time, and the end result is that I developed a slipshod attitude towards the whole thing."

314(1). "Within the concepts of these new trends all of the new technology can be put to full use. With the aid of the new materials and concepts, teachers will be able to really learn how to teach fully. A teacher can become a guide to free the child for more learning."

314(3). " . . . several reforms have a chance of being accepted by the Faculty: on-site instruction, individualized programs, student participation with curriculum design, and student participation in governing the operation and goals of his education. . . ."

315(1). "I like the emphasis on children accompanying methodological instruction. A danger in shifting from the traditional program is that the modules aren't completely developed so that basic information about teaching ideas and strategies in math, reading, language arts, are not available."

315(3). "(1) I like the idea of competency-based education. I just haven't found out how to teach it; (2) my expectations are no worse than I expected; (3) a particular problem here is the administration."

316(1). "This new approach to teaching allows the instructors to individualize more with each student, and thus, more personalization. This approach, I think, would enhance the student's retention rate and motivate him to learn, by doing it for a friend (teacher). Also, I think, this approach would enhance the student's self-image by having the teacher work on a one-to-one basis."

316(2). "I feel that the analysis of teaching strategies, planning, and demonstration of competencies is most essential to effective teaching. Also, application of competency-based teacher education techniques will instill a constant re-evaluation of teaching methods. . . . competency-based teacher education will professionalize teacher education and expand the minds of teachers and students."

316(3). " . . . the program is good, but in actuality very difficult to implement. Most of the major difficulty arises from lack of communication between on-site instructors, team leaders, master teachers, etc. So much of the instructional time was wasted on trying to agree on how to evaluate interns that the instructors didn't spend enough with the interns instructing."

317(1). "Competency-based teacher education will give to the teacher--as well as the children--a view of the learning of the children, and a look at the teacher as to how many materials can be used in that class."

318(1). "The schools, on any level of education, cannot exist any longer as institutions which have no contact with the community and/or other institutions. The multi-institutional concept and the instructional module plans, I agree with strongly--the other ideas seem to facilitate the operation of these principles."

318(2). "I don't think the total program has been nearly as effective as it should be--interns are too bogged down with scholastic requirements, program details, school district coordination, etc., to be as creatively concerned with competency-based education as I feel they should be."

319(1). "A teacher must be committed to his job, first of all . . . be willing to give his time . . . take a child's interest in developing his learning situation. Personalized instruction gives a teacher the opportunity to better understand and help a child."

319(2). "I like the competency-based aspects of the program . . . helps to know exactly what we are doing and where we are going . . . helps to plan things better . . . helps my teaching tremendously. There is the pressure of the time factor. We have to set priorities."

319(3). " . . . competency-based aspects are ideal and excellent, but rather time consuming . . . one big problem is the pressure of time. I feel that one cannot achieve to the best of one's ability either academically or practically. One has to make choices of priorities."

320(1). "I believe that the competency-based program, if adopted in a widespread manner by teacher-training institutions, could be the vanguard (so to speak) of revitalizing and making education (at all levels) a relevant and exciting experience."

320(2). "Only one course is competency-based; my feelings for the most part are very negative (60-75% of the time on meaningless academia, 30% in the on-site school, little or no community involvement, or even time for it! Teacher Corps had better get its priorities together."

321(1). "The competency-based teacher education program manifests an extremely significant method of accentuating the need for developing creativity, individual thought, a relaxed and tension-free environment for learning within the educational process. I especially like the idea of bringing in the community and other parties that are directly concerned with students and aware of their various needs."

322(1). "I feel that competency-based teacher education is the answer to better qualified teachers. I like the exit requirement as opposed to the entrance requirement idea. Through this method of selection, I feel one is more able to judge who is better qualified."

323(1). "Basically, the system appears sound: to let the student's individual aptitudes and motivational factors determine the pace of learning and the sequential order."

324(1). "This new program is to help the child want to learn

or be motivated to help someone learn. I am very pleased with this."

324(2). "I like it--overall, it helped me as a person--a new way to see teaching."

325(1). "I applied to Teacher Corps in large part because I feel something new, different and innovative has to be brought to the educational scheme if we are to survive educationally. There are a number of teachers who are literally destroying children because of their methods of imparting knowledge."

326(1). "The new trends in teacher education are greatly needed and are late in appearing in educational settings. From experience, the new trend of education can only be successful if it is structured and followed through well. The competency-based program should be workable, but it must be relevant to student situations."

326(2). "The competency-based program that I have experienced sometimes become repetitive. The competency-based program has helped me evaluate myself. The program is good, in that it gives one a M.A. degree, while paying you a stipend and gives one on-the-job training. It was deceitful in health benefit promises, wages being paid on time and the tremendous busy work aspect."

326(3). " . . . competency-based program would have been valid if there had been a form of evaluation to follow up lectures and hand-out materials . . . community aspect has turned into a farce . . . have not come close to giving 12 hours a week to the community."

327(1). "The new humanistic approach gives the child and teacher more expression and creativity in his learning. The child will no longer be afraid to open up to the teacher about problems that may or may not be related to his learning process."

327(2). "There is just not enough time to do a high quality job and all three aspects (academic learning, participation in school and community) and still remain human. One is told to set priorities, but if one is committed to education, children, family and academic learning, it is very difficult to maintain a positive self-image if you must give a low priority to something you feel is really worthwhile."

327(3). " . . . idea of competency-based is used different ways by different people. It seems to me that all education should be based on competency. I expected more organization and direction in the program. I liked the extended exposure to children . . . there has been too much destructive interaction among the staff. Too much of the interns' energies are used up in planning our own program and working out problems among the staff. . . ."

328(1). "Until the attitudes of teachers, administrators, parents and community are responsive to the need for change in the present system, not a hell-of-a-lot of learning or teaching will go on. Hopefully, the competency-based program would begin to turn on some teachers to be responsive to the needs of their students, and certainly, their own preparation."

329(1). "The child's needs and self-image are enhanced greatly by this program, mainly because it shows him someone really cares about him outside the home. . . . the new trends in teacher education can help this child with the needs he lacks, possibly a feeling of worth."

330(1). "The dual concepts of self-pacing and increased exposure to actual classroom situations are two vital elements in assuring a faster and more successful development of truly competent classroom teachers. My response would be that on paper it sounds superb, but in fact its success would depend largely on the competence and diligence of the teacher who was administering it."

330(2). "With reference to the whole program, I am disappointed: (1) the program is highly disorganized and the chains of command are totally ill-defined; (2) personality conflicts have promoted a feeling of distrust, fear, and anxiety in me; (3) internal politics seem to add to disorganization, distrust and inability to gain maximum knowledge."

331(1). "My general feeling about what the trend of education today should be was expressed quite well throughout the presentation. I noticed that the other nine trends did not differ that much from the competency-based program."

331(3). ". . . competency-based aspects required extreme discipline from all levels. There have been a lot of disappointments, but this is expected in a program such as this. . . . Problems revolve around the weaknesses of community-based programs not being tied to the competency-based programs."

332(1). "I don't know much about teacher education at all. I went to college where I was taught on a competency-based program and I like it."

332(2). "Sometimes it's not really what I think competency-based education should be, but merely programmed (like computerized education). I prefer more individualization."

332(3). "Competency-based education is a good idea; however, the emphasis seems to be on general subjects to be taught in the schools and not enough emphasis is placed on the intern's skills . . . this idea of the intern meeting the needs he had when he entered Teacher Corps has been completely put aside. . . . My team leader and faculty adviser were really making Teacher Corps worthwhile."

333(1). ". . . the trend is good, in fact, ideal. What is difficult is to train future teachers toward these goals, especially when they themselves have been taught in a drastically different manner. If to 'teach' means bringing about growth in children, then that is ideal."

334(2). ". . . very useful and a productive way to innovation. The structure is very strongly enforced, but in the beginning it lacked organization. The program has begun to give me a firm foundation from which to begin as a teacher."

335(2). " . . . competency-based doesn't freely come to grips with the attitudinal and value experiences in a learning situation. The opportunities to utilize the competency-based techniques are few and far between. Overall, the program is promising for me, if I can adapt the input to fit my ability without too much interference and petty structure."

335(3). "The competency-based aspects are still in its developmental stages. It still leaves a lot to be desired in terms of the clarity of direction presented by the staff. I see competency-based education in smatterings developed by different people each with a varied viewpoint. Nonetheless, the exposure I've had to competency-based education has given me a glimpse at the possibilities it has as a sensible method of curriculum development and instruction. . . ."

336(2). "I am in favor of the continuation of the competency-based teacher education. . . . The purpose and objectives of the program have never been doubted and are very clear in my mind. Now I can see real progress in myself and those around me."

336(3). "I feel competency-based on-site training is by far the best method for teacher education. The program is not bringing about changes in the traditional program. A major problem has been inter-staff communication of problems to each other."

337(2). "So far I have felt highly frustrated and overburdened. The module clusters are well organized and I can relate to them, but there are simply too many. The competency-based aspect of the program, I feel, will help me become a better teacher if I can assimilate all the material being presented. The program as a whole has fallen short of my prior expectations. Much is expected, but is it a realistic expectation on Teacher Corps part?"

337(3). "The competency-based aspects have not been fulfilled by the staff. . . . There has been little or no consistency in those people who have been assigned to give us the experiences necessary for competency-based teacher education. Communication between staff and interns is muddled. Our training has lacked proper or enough curriculum input. My expectations are about nil at this point. . . ."

338(2). "I feel competency-based education is the thing for better education. I feel the Teacher Corps locally is not totally committed to the interest of the intern. There should be some concern for individual needs."

339(3). "Elementary education has not kept pace with the progressive trends . . . I think we must move away from the standard 'all white' middle class approach to education and attempt to make education relevant to other cultural groups. The problem area seems to be in providing an education that is stimulating and meaningful to elementary school children, especially in the areas of social science and language arts. . . ."

340(2). " . . . As yet I cannot evaluate its potential success or failure. Intellectually, I support competency-based education very much, . . . I somehow hoped for more guidance and training dealing with low-income families--psychology, discipline problems, etc. . . ."

340(3). "I feel that the Teacher Corps program has spent too much time on administrative problems and has generally been disorganized, but I do have deep hope that the coming year will be extremely successful."

341(2). "I feel that the experiences that I have had in Teacher Corps thus far have enlightened me more on areas of: (1) the disorganization of the program, and (2) the inconsistencies of Teacher Corps guidelines. I don't feel that the entire staff is trying to help us (interns) very effectively through this program. . . . Competency-based aspects don't all seem to tie in with what I'm doing now in the classroom."

342(2). "The personality of the Teacher Corps staff is overall compatible to me. . . . All of the personality differences are not intolerable or damaging to the actualizing of my potential or to the success of this program. . . . The courses given to us are starting to show promise of becoming relevant. . . . The attitude of my peers is generally a healthy positive outlook. My team and team leader interactions are very favorable, creative, exciting, and honest. . . ."

342(3). "Once again, a semester of inadequate instructions or direction from the staff at the college Whatever was learned, happened in the classroom setting of the elementary school."

343(3). "My feelings concerning competency-based education are mixed. The positive feelings deal with the agreement that objectives and goals are a necessary element in maintaining a perspective of direction. The negative aspects, however, are centered in the area of 'not seeing the forest for the trees'--too much activity in educational philosophy may prohibit actualizing potential. My peers for the most part are people of integrity, warmth, intelligence, concern for others, and responsible. The staff has shown attempts to bend with the demands of the interns to implement social and educational changes. . . ."

401(3). "The classroom experience has really been beautiful. The college experience is a continuous hassle. Most professors have no conceivable knowledge of competency-based education."

402(1). " . . . To have no set curriculum with no set time in which a student must show his growth and proficiency in a subject is a great leap forward. A child may develop at his own speed, utilizing his own potential, which can only help to bring out his desire to learn, his hidden talents, and incite him with motivation and confidence . . . beneficial to the student-teacher . . . very impressive thing was emphasis on exit from school, not the entrance."

402(3). "Any competency-based program is only as good as the

teacher. A problem of concern to me is the community aspect--making ourselves felt in the community, and knowing what organizations or activities to engage in."

403(1). " . . . When properly implemented, this program would give the student of education a relevant background and education for his career as a teacher. It will give the student-teacher a chance to experience many different aspects and avenues of teaching . . . the only difficulty is the conflict of traditional professors who are trying to teach competency-based education. . . ."

403(2). " . . . the tota- program through preservice and thus far has been totally disorganized. This disorganization and incompetency has been very disillusioning. I'm still hopeful, but my enthusiasm has been thwarted with each new step. . . ."

403(3). "Competency-based has primarily been responsible for a feeling of utter frustration. The total program is pretty good, but is not what I expected . . . have been very disappointed. The best part of the program is the teaching practicum. . . ."

404(1). "I like the idea of small group seminars and discussions because I believe it will encourage your shy, reluctant student. . . . I see this system improving the lot of the average or slow learner, by enabling him to progress at his own rate, without stifling his creativity or destroying his initiative by emphasizing the speed one reaches his goal. . . . I hope that a teacher would not find herself bogged down with plotting graphs and progress reports. . . ."

404(3). "It is my expressed opinion that it will be a long time before the competency-based education replaces it in the school system. There are certain skills and facts that children must learn and so far the traditional program seems as good as any in presenting these ideas. . . ."

405(1). "The changes will, at least, erase the teacher-pupil alienation. Competency-based programs allow students to learn at their own rate of speed, learn what interests them in relation to other subjects. . . . Student groups using discovery method seems to be a more positive way of learning. . . . implementing this in our present public school system is not realistic. . . ."

405(2). "I feel the camp experience was the most positive aspect to becoming a competent teacher. The follow-through program follows; almost exactly, my conceptions of needed changes in education. I am feeling more positive toward the program than I did in pre-service. . . ."

405(3). "Competency-based aspects has been alright. The program has met expectations; however, I am having doubts about myself in this type of program. I feel, to be involved in this program, one has very little time to himself for self-evaluation and planning for change."

406(1). "There are certain elements (competency-based) that I like

very much: (1) de-emphasis on factual knowledge and emphasis on performance and product, (2) elimination of strict time limit, (3) emphasis on exiting requirements, (4) the shift toward more student-teacher contact, and (5) attempt to make education more meaningful and relevant. . . ."

406(2). "I am very happy with the teaching part of the program so far. The course work is extremely disappointing, not challenging intellectually, totally stifling, and a waste of time. . . ."

407(1). "Guarded enthusiasm. Generally the new trends sound very good and perhaps herald the return to humanistic education as opposed to mechanistic education. As stated, any new process must be an effective blend of all the new trends and methods. . . ."

407(2). "I feel competency-based programs can be very beneficial. . . . My feelings toward the program are ones of guarded enthusiasm and hope that the program can work. I'm still reserving judgment."

408(1). "Students work at their own pace. Several methods of instruction are used in addition to traditional teaching. Competency-based program sounds nice--but is it practical for public school systems?"

408(3). "I have negative feelings about competency-based teaching as no one has fully explained it to interns. Also, I question competency of those attempting to teach a competency-based program. I am extremely disappointed, except by my involvement in the school. The main problem is one of communication. . . ."

409(1). "The new trends in teacher education seem to be the only intelligent and practical ways to handle the problems resulting from the traditional teacher education programs, problems which partly arose from too much time spent in the classroom. Actual working experience with children is the only sensible course to pursue."

409(2). "At this point, it is difficult to comment on any competency-based aspects of this program--our classroom experience is an on-going thing and is actually the only practical aspect of the program. In fact, it is the only worthwhile aspect of the program so far."

410(1). "I feel that knowledge of aims assists the learning process and somehow increases the integrity of the system. Moreover, the individual progress and the interest value increases motivation. . . . Really like the idea that the individual has so much responsibility for his own actions and choices."

410(2). "I feel that the ideal competency-based experiences would be fine, but as long as professors define module and competency individually, the ideal doesn't exist. The thing that makes the whole program bearable is the school."

410(3). "I have not experienced much competency-based material. . . . I feel that Teacher Corps has not accomplished many of its goals."

. . . innovation is not really implemented and to some degree the lack of fulfillment is resulting--I think the major problem is feeling of superfluosness in the school situation."

411(1). " . . . the real criteria then is how the teaching program affects the student--positively or negatively. Any of my judgments would be of a most theoretical nature, but it would seem, however, that competency-based education has real insights into the development of the student as a person and this, I believe, is very good. How it will work is another question."

411(2). "Pleased with program--have learned some more about competency-based education, but hope to learn more as we proceed and are able to test it in practice rather than theory. Believe competency-based is one way towards improving education--there are others."

412(1). "New basis offers more faculty-student discussion and encourages using theories right away, instead of just learning about them."

412(2). "We have not gotten into the community as much as I expected. The school is much too hung-up over routine and I feel it is unnecessary, but we are continually cautioned not to rock the boat. I feel frustrated, but things are improving. As compared to my pre-service ideas about the Corps, it is not as exciting or as challenging as I expected it to be."

413(1). " . . . the most important and most logical is the idea of each person treated as an individual in the learning process. Everyone should proceed at his own rate. Student teacher should be student teacher for four years rather than one semester. . . ."

414(1). "I feel competency-based teacher education can be used in the classroom. The student should progress at his own rate of speed with encouragement and motivation from his teacher. The teacher should set a goal which the student should finish (at his own rate). . . ."

414(2). "As a whole, the competency-based program is good. However, this is not used widely in the school system I am in. Being an intern, I think, much can be done for the low-income children through Teacher Corps."

414(3). "My expectations of the program were not met. My feelings were that there would be new ideas learned in the classroom approach. Visitations made to different schools have been helpful. Motivation is my basic problem area."

415(1). "Competency-based approach appears to be a more helpful way to teach and get useful ideas presented to all children and appears to allow all children to move at their peak levels within a more individualized form of teaching relationship between the student and teacher. . . . I would like this new system to be incorporated throughout the educational process. . . ."

415(2). "I am somewhat enthusiastic about competency-based aspects, somewhat hesitant about its overall results. My experiences in Teacher Corps seem well founded and beneficial. It seems the program would be implemented much more readily, if change occurred in the higher levels and moved downward."

415(3). "There doesn't seem to be enough feedback or evaluation of competency-based criteria. I feel the program should be further developed to cover broader areas of competency. The problem that I have is assimilating a competency-type situation within the traditional scheme which I find myself."

416(1). " . . . As a short-lived education major, I found a big fault to be the irrelevancy of the curricula. I feel the more time spent in the public school, the greater amount of interaction she has with children; the more actual classroom experience, the better the teacher she will become. . . ."

417(1). "New trends and competency-based teacher education, I think, would be most useful on the undergraduate level. For Teacher Corps members, I think, it would be somewhat irrelevant. I don't feel that Teacher Corps members really have the time or will be granted the time to achieve at a rate better suited to his individuality."

418(1). " . . . I consider it extremely important for teachers to be testing their skills in a real setting all through their college training. . . ."

418(2). "In the Teacher Corps so far I feel very positive about the competency-based aspects and also feel that it should be incorporated into our teaching per se. My expectations were a bit more up in the air and abstract . . . the realness of the situation is good. I feel I am growing and watching, learning ways to be an effective teacher in an inner-city school."

418(3). "Competency-based aspects seem misunderstood by the professors. The aims of students, profs, and Teacher Corps directives were in conflict. . . . The whole set-up attracts an idealistic type of individual. My major problem is role-identity. I have become very active in the community and most of the kids forget that I am a teacher. It becomes hard to teach (with discipline) a large group of children."

419(1). "My major personal reservation is the attitude toward the student as a 'product.' . . . The implicit attitude is that the 'student' is something which is acted on to make 'it' respond in the desired fashion."

420(1). "Having myself been placed very abruptly in a position of total teaching responsibility . . . I can appreciate the gradual approach, in which one begins with 'micro-teaching' and moves at his own pace toward full teacher responsibility. Emphasis on performance and product is also good. . . ."

420(3). " . . . I find competency-based program superfluous to my present teaching experiences, time consuming and annoying."

421(1). " . . . the only true experience a person receives is student-teaching. A teacher should have more training throughout his program. . . . Competency-based programs can be good when teachers understand it more and accept it as another way of teaching other than the traditional way. . . ."

422(1). "I wish I had feelings on the matter, but this would require better understanding. . . ."

422(2). "Things have been a bit slow. The program is yet to develop a complete modular system. The limited exposure was somewhat enlightening. Forthcoming events promise a greater conjunction at theory and practice. This should assist any further consideration of competency-based education."

422(3). "The impact of the competency-based program is based on the proficient student and his acquiring of proficiencies. I have found responsiveness based on the responsible approach. Prior experience in traditional programs has been rigorously guarded. The advancement in technique is geared to deliverance."

423(1). "The idea of achievement versus time appears to be a much better way of learning. This appears to be one of the main ideas in the program. My question concerns how the program works in a school. How do you go about teaching individuals at different rates? I think it is a much more effective way of learning, but difficult to carry out."

423(2). "I like the modular program in its ideal form very much, and we have had some good modules to work with. It's also much better to get into a classroom, do things, and get feedback rather than to read theories from a book and then one or two years later, go out to see if they work."

424(1). "Competency-based teacher education allows for much more flexibility . . . greater freedom for both teacher and pupil to express themselves and learn together . . . places greater responsibility on the teacher since he or she has less 'structured' and 'learned' techniques to fall back on."

425(1). "Competency-based teacher education relies on exit requirements . . . allows enough time where it is needed . . . progression at one's own rate is good. Program has specific criteria which must be met and it measures what has been learned. . . ."

425(2). "I feel very positive about the competency-based aspects . . . stating of objectives and terminal behavior is much better than I expected it to be. . . ."

426(1). "I feel positive about emphasis on exit requirements. This program also is more flexible than the traditional program because it allows students to make progress at their own individual rate."

427(1). "The logic from which the program has been derived appears

to be very good . . . the program must be a positive replacement and not a change for change's sake. I think it is a positive change."

428(1). "Competency-based teacher education allows the teacher to be closer to students and establish a more positive relationship in regards to student-teacher relationships. . . ."

429(1). " . . . Competency-based teacher education is better since it is based on individual performance . . . allows the individual the opportunity to gain as much as possible out of the subject matter as he works at his own rate. . . ."

429(2). "I don't feel that I have thus far had the experience with the competency-based program to the extent that I can voice an opinion."

429(3). " . . . we have been taught a great deal about competency-based teacher education, but we have little opportunity to exercise what we learn. I was very ambitious to try this approach, but I have found it to be impossible working in another teacher's classroom."

430(1). "Competency-based teacher education can be effective. . . . I feel that more time should be spent on the individual performance than on testing the individual. . . ."

430(2). "I have not had that much experience related to competency-based teacher education and, therefore, I am not able to discuss it at this time."

431(1). "Although competency-based teacher education is more personalized and more informal, it creates the problem of not having enough teachers to adequately perform in this area . . . possibly both traditional and competency-based programs might be incorporated. . . ."

431(3). " . . . the in-school service that the intern performs is invaluable. Competency-based teacher education appears to be the most valid approach. . . ."

432(1). "To have a better utilization of competency-based teacher education, the school calendar would have to be radically changed . . . faculty would have to change--more teaching and student contact. . . . The student-faculty one-to-one contact would be a decided improvement. . . . Exposing student-teachers to small group teaching over a longer time. . . ."

432(3). "We need leeway to take courses which would strengthen over weaknesses . . . assigned 'permanent' situations too soon . . . if a 'portal' type school is not available, interns should not be penalized if we don't function in a traditional manner. . . ."

433(1). "I perceive the new trends as good ones if they can be implemented in reality. Specifically, the individualization of instruction and some insight and understanding of the cultural and social background of the student to assess his cognitive understandings. Also, the field-centered curriculum."

434(1). " . . . it is a less formal type program of education where expectations and goals are made known from the outset . . . for the majority of humans, who are interested in obtaining either graduation or just a degree, the program seems highly unreasonable. . . ."

434(2). "Competency-based teacher education, I believe, may work in a college setting where independent study is what is desired. Our obligations in this program are so many that competency-based education cannot be given a fair chance. We do not have the time to work on classwork. . . ."

435(1). "It sounds very hopeful. . . ."

435(2). "I feel competency-based teacher education aspects of program were rather weak . . . my interest in some modules has not been sufficiently aroused. . . . I expected the program to be more comprehensive and involved than it has been up to now."

436(1). " . . . may need to incorporate enough of the traditional approach so as not to lose control of the situation . . . may be lack of direction on the part of the student if he is left to 'do his own thing' so to speak."

436(3). "Overall, the experience I have had is positive. I have not had enough experience in competency-based teacher education to form any concrete opinions. The courses I have taken, overall, have not been very educational. The most beneficial aspect of the program has been the on-the-job training."

437(1). "It seems positive in respect to students working at their own rate and level. . . . I am somewhat dubious about the validity of defining what experiences the student should have and whether the student teacher can be evaluated by pupil's performance. The module structure seems to allow for individualization and student preference. . . ."

437(2). "The community module was good. The interaction analysis is too involved and we have not had the time to devote to it. The early childhood module was ridiculous. The Teacher Corps program is good, but we are spreading our time too thin over a multitude of activities."

437(3). " . . . courses have been irrelevant . . . administration is out of town or unresponsive to intern interests . . . few positive examples to learn from . . . community work has been undirected . . . at this point, morale is very low. . . . I have enjoyed my contact with the kids and the community . . . competency-based teacher education isn't the panacea. . . ."

438(1). "New trends do not seem to me to be that new. Except in a few instances, the points mentioned correlate with the usual steps in lesson planning or as called here, modules. You are supposed to have pretesting, instructional objectives, procedures, technique,

listing of materials (with emphasis on creativity) and finally post-testing--exactly what is the difference between traditional and competency-based education?"

438(2). "I basically feel let down in the program, but cannot exactly pinpoint the reasons. I do not think I have directly experienced any competency-based aspects of the program and, therefore, cannot make a statement to that effect."

439(1). ". . . the concept and use of the instructional module especially interests me . . . the module approach to instruction seems to offer much more to every student. . . . I am interested in working with this method and more vigorously studying this method. . . ."

440(2). "I haven't had enough experience with the competency-based program to readily discuss it at this time . . . the experiences I have had have been meaningful. . . ."

501(1). "I think the new trends are very good. They give the student more time to be independent and less time for dependency. This is very good because the student will be able to learn by his mistakes."

501(3). "My Teacher Corps experience for the last nine months has been a rewarding one. I have learned how to recognize the feelings of other individuals."

502(1). "What has impressed me the most is the avoidance of stocking theory into the student without permitting actual implementation of the theory. This is what I feel is most important. . . . In a competency-based program . . . the person will be able to understand his own ability to implement theory in his work as well as his thoughts. A person will be allowed, in an early stage, to recognize what he can and cannot do and how to change. It will provide a situation in which such change is possible. . . ."

503(1). "I think the new trends in education discussed would be good for both the student and teacher. . . . a more realistic approach to education rather than the traditional would be much better. . . . the way the program is set up a child will also be much more independent in thought and ideas."

504(1). "Is competency-based teacher education so new? In the field of educating teachers, perhaps it is a new innovation; however, 'enlightened' teachers have been utilizing this or similar methods. It does appear to be a great improvement over the usual, or traditional, college-university teacher education program in that the teacher education student is allowed more freedom and individual initiative, which I believe is good, and also that the training takes place primarily with the end product rather than being an isolated program, separated from school children. Teacher education must continue in this and the other noted new trends if beginning teachers are to cope with today's school-age children."

504(2). "The competency-based aspect of the program isn't really being applied; assignments are given . . . on a class basis, rather than according to individual intern's needs, abilities, or competencies already attained, and avenues of demonstrating proficiencies aren't available. The program is not structured so as to produce competent teachers--traditional methods (i.e., specified reading assignments along with reports) are utilized--while interns are expected to be innovative!"

505(1). "I feel that competency-based teacher education concept will give students more of a chance to develop at one's own rate. The traditional education program places attention on the group as a whole rather than the individual."

505(2). "The experiences I have had so far have made me more aware of competency-based education and differences of it and traditional education. I felt the program was designed to train interns to meet the needs of so many students, who have yet to be reached by any means of educational experience so far in their lives."

505(3). "My feelings about competency-based education have changed considerably since my experiences in Teacher Corps. I feel the program is a much needed program in most of our schools if students are to feel worthy and want to achieve more."

506(1). "I think the competency-based training . . . far outdoes the academic 'training' programs offered in most educational schools of the traditional sort. . . . The reality-based portion satisfies the need people feel to be learning, not memorizing. The difference being experience."

506(2). " . . . I don't feel I can answer yet--but I can say generally that we were allowed to believe a great many idealistic doctrines having no relationship to the reality in our particular areas of work. Long on theory and enthusiasm and short on application and functional participation. . . ."

507(1). " . . . the competency-based program is a much better program than the traditional teacher's program. If competency-based teacher education program instills all the characteristics that are supposed to be instilled, then not only would it contribute to students but to ourselves as individuals."

507(2). "The competency-based teacher education experiences . . . are very positive. My feelings prior to becoming an intern were 100% . . . as an intern . . . towards the program as a whole is 89%. . . . too many 'hang-ups'--interns who do not want to move to a specific locale, transportation, paying rent in two places. . . . interns who do not cooperate. . . . Some instructors are very understanding, others are not. If a group really wants to work together . . . the program is going to be successful."

508(1). " . . . sounds good. One thing I really liked . . . was spending most of the time in the classrooms . . . being responsible

for our own studying sounds scary; it's very different, but sounds challenging. . . ."

508(2). " . . . I have only observed. . . . have become fully aware of the changes and sincere help that is needed. . . . to let students succeed at their own rate and to be competent on the level he's working is assuring that the student will get something out of that lesson. . . . I looked upon the program as just another traditional teaching job. Now, I want to help change those things that need changing and look for new and better methods of teaching the students how to learn."

508(3). " . . . Competency-based teacher education is more beneficial to the students. It almost guarantees . . . student will learn what he sets out to if he is capable of learning. I knew nothing of this program prior to becoming an intern. The biggest problem . . . is selling the program to a school district that knows very little about it."

509(1). "The idea of competency-based teacher education is very good. . . . learning theories and practices of how to teach rather than learning to teach a set body of facts seems much better. Facts are always changing. . . . I wonder whether it might eventually be possible to institute competency-based student education to bring these programs to elementary and high school level. . . ."

509(2). "During preservice it was difficult to determine that we were in a competency-based program completely. . . . Generally these sessions were good. . . . attitude toward the entire program has become more positive since entering field work. Actually working with children has been very enlightening as I have experienced concrete situations. . . ."

510(1). " . . . children from ghetto areas have many problems . . . teachers must be community-oriented, know parents, . . . The classroom setting must . . . move toward student-center instead of teacher-center."

510(3). " . . . Competency-based teacher education is necessary and if it can be presented correctly, will be beneficial. . . . It is ideal for any teaching situation. . . ."

511(1). " . . . Competency-based teacher education will work. Having student move at his own pace, . . . is a good step. The student won't feel rushed and his chances of retaining what he needs to know will stay with him longer. . . ."

512(1). "Competency-based teacher education seems to be the answer to what has been needed for quite some time. The competency-based teacher education plan seems to be workable. . . . The interdisciplinary curricula, personalization of instruction, I think will be beneficial as they will help an intern achieve better expressive and instructional objectives."

512(2). "Competency-based education is certainly a need but . . . it is difficult to implement this idea into the traditional education system. . . . present education system demands that they (children)

work with and comply with ideas which are not relevant to the child's immediate environment. Teacher Corps as a whole is what I had expected, the only one thing I have disapproved of . . . has been administrative malfunctions. In some cases, people spearheading the program at the elementary school level seem to think that interns are as experienced as they are in the education field."

512(3). "Competency-based education has not been a reality. . . . The philosophy . . . is beautiful, but we . . . have not experienced a suitable competency-based program. . . . I envisioned Teacher Corps to be an organized program but my experiences in Teacher Corps have not been as such. . . ."

513(1). "The idea seems to offer a lot more to education. The possibility of on-the-scene training is exciting. . . . to work at one's chosen rate seems promising. . . . will eliminate boredom and perpetrate interest in students."

514(1). " . . . Competency-based teacher education is more direct and 'to the point.' . . . puts more emphasis on the output than the input, and . . . it doesn't matter how long it takes to make someone understand and comprehend as long as the goal is achieved. . . . this method is a better way than when students are being taught and expected to comprehend when situation is not relevant to their living conditions."

514(2). " . . . situations in the school district where I am could be improved by use of competency-based teacher education program. . . . Competency-based program is the better way to reach these deprived students and normal students, also."

514(3). " . . . I am more positive in my thinking. . . . a curriculum that is competency-based is what's needed for low-income and minority groups because each person can be rated individually and not by standards set"

515(1). " . . . new trends in teacher education and competency-based teacher education are long overdue. For a number of years, students were expected to perform like robots. . . . carbon copies of their instructors. . . . I believe in individual differences. Competency-based teaching seems to cater more to the individual. . . ."

515(2). " . . . experiences have been encouraging. I am in favor of competency-based aspects because they seem more relevant to the needs of the students. . . . I am becoming better oriented toward the goals . . . and now feel relaxed as I understand just what the program is seeking to achieve. I wasn't clear on the aims of the program at first."

516(1). " . . . I am optimistic about the innovative trends, the thinking, which guide this type of program. I am most hopeful for the freedom of expression . . . this allows for the teacher and the pupil. Freedom--with sensitivity and a firm foundation of direction. It will work as long as the individual teacher is truly aware of the needs of the low-income group. . . . I could foresee a danger point in this field--the proper training (immersion and involvement) of the competency-based teacher in the areas of home and neighborhood."

516(2). " . . . I do not feel that I relate to competency-based education. . . . Competency-based is philosophical in its approach, but offers no concrete methodology. It is a philosophy and . . . I agree with its directions. . . . But, then we encounter reality and the practical application of competency-based education. . . . beyond its philosophical niceties,--competency-based education is just a redistribution of the same old wares in the traditional classroom. . . ."

517(1). "Having been taught by traditional-based teachers, I feel almost any innovation will be an improvement. It would seem that competency-based teacher education would be a vast improvement; I know too little as yet to judge.

517(2). "My reactions are positive except for lack of support or inconsistent support from program."

518(1). " . . . these new trends are a step forward in the production of good, competent teachers . . . seem to allow the student more time to gain more experience in the teaching field . . . seem to focus on closer student-teacher relationships. The competency-based teacher education program allows the student equal time to study, work toward a degree through class work, and gain experience and competency through field work at the school. In essence, the competency-based teacher education program . . . explains itself in that this is a program designed to produce competent teachers through experience gained through working closely with students and having the opportunity to learn and gain experience simultaneously."

518(2). " . . . Competency-based education is not only a new facet of education, but it is a theory that should be experimented by all schools . . . allows all students to learn and at their rate of speed. . . . Competency-based education is a definite way to reach the slow student."

519(1). " . . . Competency-based program good because it is more concerned with performance output instead of the knowledge criteria. . . . takes the different abilities of each child into consideration and places less emphasis on time. Also, the competency-based program recognizes this communication gap [in the traditional program] and tries to reduce it and . . . provides the means for it--less lecturing and more discussion."

519(2). " . . . I am all for competency-based program . . . it will help the children in the long run. . . ."

520(1). " . . . Competency-based teacher education seems to be the answer in that it focuses upon teacher-student relationships and educational experiences. . . . enables more time to be spent with the child in order to determine his own individual needs and abilities. . . ."

520(2). "There have been very few competency-based aspects applied to the educational curriculum in so far as I have observed. Most teaching is still done on traditional methods."

521(1). " . . . Competency-based teacher education is much better. . . . the student-teacher is able to learn (from doing in the community together with the classroom) free from the confines of the often irrelevant multiversity where all too often the mere completion of a set number of credit hours qualifies one to teach children. . . ."

521(2). "I am strongly in favor of implementing a competency-based program in every school district in the United States. It is good because it states behaviorally (concretely) . . . amount of expertise . . . to be proficient. . . . thing of accountability appeals to me because . . . people must have incentives to do their best."

521(3). " . . . very favorable about competency-based teacher education programs. To tell a person what you expect before instruction is the best way to insure that he will be measured properly. Also . . . good to take the person where he is and allow him to do just what he is capable of doing. . . ."

522(1). "Basically, it sounds like a good program. However, I am still in the dark as to how the program operates on an individual self-pacing program. The faculty-intern interaction is a great idea--this way we'll spend more time than in normal classroom circumstances with the teacher."

523(1). "Competency-based education appears to be an attempt to highly structuralize some less recent education trends which were called the 'student-centered' or 'phenomenological' approach to education. From the little I have seen I would say there is too much concern being shown about structure."

523(2). "If carried to its ideal format, competency-based education would be a good, but not the best, innovation in education. When carried out on a practical level I do not as yet see how it is really any different from the traditional lecturing followed by a test system. Prior to becoming an intern I had no real great expectations for this program. My only real criticism is that it has come so short of achieving its fullest potential."

524(1). "The new trends are heading in a good direction because they stress interaction between teacher and student, faculty and teacher. How a person performs is a better guide to his actual teaching competency than the amount of time he has spent with his nose in a book."

524(2). " . . . Having completed the pre-service training and three weeks of inservice, I see the need for a complete revamping of our educational system, and a competency-based program being a very definite part of this. But I also see that competency-based education is not the only answer. . . ."

525(1). " . . . Competency-based teacher education allows a very positive approach for improving the learning process of students. . . . permits the child to learn and advance at his own rate of speed. . . . end product will be a more complete mastery of skills which he has learned."

526(1). " . . . seems to be on the right track in allowing the achievement to be constant and the time variable. I like this approach very much. . . . Each student would eventually know the satisfaction of accomplishment. . . . The development of self-esteem and satisfaction are linked closely to the ability to do something well. A well adjusted person is one who likes and respects himself. . . . this system would encourage this.

526(2). "Competency-based education can be the answer to the minority and disadvantaged child's need for an educational system which is designed to meet their needs. . . . The key will be the teacher-education system and the degree of accountability required. . . . Modular Instruction was defined and I do feel competent with this method of instruction. . . . Program has been one of the most intensive learning experiences of my life. However, the learning has come mainly from consultants and the exposure to an entirely different culture from my own. . . . it is most frustrating to work within a system which teaches about competency-based education but does not teach using competency-based education. . . . However, instructors are trying to discover the needs of the interns, take us from where we are and lead us onward. . . ."

526(3). " . . . Competency-based teacher education is a myth here . . . , no individualization, no self-pacing, no choice of instructional modules, and no choice of sequencing of instructional modules. . . . modest tinkering in the workings of competency-based curriculum . . . used to delude intern. . . . included traditional instruction in the making of an instructional module, traditional instruction in writing behavioral objectives, and the mandatory completion of instructional modules prepared solely by instructors. . . ."

527(1). "It is refreshing to me to see the reorganization that is coming. For eighteen years I have been the 'victim' of outdated learning methods. I don't profess to believe that competency-based education, as it now stands, holds all the answers, but it is certainly a step in the right direction."

527(2). " . . . Teacher Corps will be relatively ineffective in the area of creative educational systems, the populace being completely unwilling to cooperate, their concepts . . . having been formulated in the traditional sense. . . ."

528(1). "I favor any program which will encourage students to explore areas on their own. . . . Programs which allow self-pacing and individual work are excellent for many students. . . . My initial response is that this presentation is not drastically different from one other educational trend. . . . I strongly support independent creative work, teaching by competent specialists in a field, and the possibility for a great variety of experience inside the classroom as well as out. It is the curiosity of the teacher as well as his creativity and willingness to give something that will make him successful. If competency-based teaching programs will incorporate all that it claims, it will be a move in a positive direction."

528(2). " . . . I see the need for competency-based instruction.

Students must be able to enjoy their own development and must be able to appreciate themselves as individuals and there is a way to do this through competency-based education. Initially I was disappointed in Teacher Corps. I have found that I did benefit from preservice training but have my own ideas in regards to improvements. . . . like to see more consultants, to learn more of resources available to us and to have been better acquainted with the older methods we have come into contact or conflict with. . . . am optimistic and hope to help change come about."

529(1). " . . . Teacher education intern is to assess the teacher and help form other roads of achievement and apply to examine the overall ability of students through other than traditional criteria. But at the same time have a greater understanding of how the traditional system is working."

529(2). "Competency-based program is by all means an advanced method of education. And in my belief is going to be the most in developing new educational advancements in a child's learning ability."

530(1). "The new trends in teacher education seem to allow the student a better opportunity to get more out of what he is attempting to learn by allowing him to learn at his own pace."

530(2). "My knowledge of competency-based education is somewhat fuzzy; but I am learning. . . . I felt that this program was going to make an instant great teacher out of me; but I know now it takes time. The program isn't perfect, but I have high hopes that it will improve with time."

531(1). "The information that has been given can be summed up in my opinion in one word, great. The students that participate in this program can accomplish so much if the teachers carry out the objectives of the program."

531(3). "The competency-based aspects . . . have been somewhat limited in the school system in which I worked due to the system itself. However, I did try to implement this type of education. My experiences in the University in using competency-based education have been quite disappointing. I feel the teachers . . . were too tradition-oriented and did not try to implement competency-based education."

532(1). " . . . I believe this program to be more positive and effective than the traditional type program. It should be very interesting coming in close contact with the student and his family as indicated in the pupil-teacher relationship. This relationship should further aid the teacher in helping the pupil to achieve."

532(2). " . . . the idea of a competency-based program is very good but the problem comes when you try to implement such a program to a group of people who have already formularized their idea about how much a particular child should learn. I still need more actual experience in the program before I can formulate any other reactions."

532(3). "I am still sold on this idea of competency-based education."

533(1). " . . . new trends in teacher education are long overdue. They allow for a more personal contact with the students, . . . lets a student advance according to his own mental and physical capacities. . . . Although the criteria in the competency-based program are pre-set, they are established according to the student's intellectual, social, emotional, and physical growth. . . . program is set up to help students achieve according to a number of objectives, and an instructional module. . . ."

533(2). "The competency-based aspects . . . are very relevant . . . and inject a more modern approach to learning. . . ."

533(3). " . . . program is a good one, if it could be incorporated fully into the traditional school setting. I feel that the program had a good philosophy because it was aimed at helping children from low-income areas become better self-sufficient citizens. Problem areas include adequately preparing interns for the task on which they are to embark upon, with information on how to handle typical classroom problems."

534(2). "My experiences have been enlightening because I had little or no knowledge of the education process before entering the program. I came into this program with an objective outlook. . . . have been exposed to traditional educating methods and participative methods. . . . I have observed that the students do not relate to the process of learning under the traditional system. I am therefore over-anxious about getting the competency-based aspects of the program underway."

535(2). "I have been impressed with the motives of Teacher Corps. . . . should be the basis of a new educational movement, however . . . my knowledge of competency-based innovation is quite limited. But when I do master this, certainly it shall be of value to all concerned. . . . concept of the Teacher Corps should be somehow introduced to every public school in the United States."

536(2). " . . . the whole idea is still rather vague to me. The program is very slowly moving in the direction of competency-based education but as of now the experiences I have had in line with my expectations prior to the beginning of intern training are shaping up nicely for this to be a whole new area of new methods."

537(2). " . . . program has provided me with the knowledge of how to create a situation where I can teach students on an individual basis. . . . most effective. . . . My feelings . . . haven't changed a great deal. . . . Through one-to-one- contact, the student has a better chance of learning and the teacher has a better chance of recognizing problems of each individual."

538(2). "My feelings about the competency-based aspects of the program is very, very applicable, but not practiced in my school. My feelings about the program are rather disappointing."

539(2). "I think the competency-based aspects could be meaningful ones, except I feel there is a lot more involved than what we have yet experienced. I felt that the program would be a good one, but I didn't realize how much of a drain it would be financially and emotionally. . . . Disappointment."

539(3). "My feelings, thus far, about my Teacher Corps experiences are that it looks a lot better on paper than in practice."

540(3). "The competency-based aspects of our program are not practiced consistently enough to give it a true rating. The problem being not enough freedom to work with the students without traditional method overriding the procedures."

601(1). " . . . because of a new 'breed' of students there is a much greater chance of a competency-based type of education working. . . . The competency-based program, I feel, allows the most room and opportunity to see these goals through."

601(2). " . . . very disappointed to find our courses were not at all competency-based. . . . the two-week field work was an excellent experience . . . I believe a much more concentrated program would have been welcomed by all, especially myself. . . ."

601(3). " . . . have had no, or very little, competency-based teacher education . . . field experience is valuable but education courses are no help at all . . . knowledge of suitable teaching activities and how they will work in the classroom is a major problem. . . ."

602(1). " . . . the program appears theoretically to have much sound potential. A teacher who is thoroughly knowledgeable in this area would provide the students with both the motivation to learn which is of prime importance and, secondly, the tools with which to learn. Also, curricula could be so designed to allow the student to gain the tools to learn and do research rather than be given many facts. . . ."

602(2). " . . . very inadequately presented and caused total frustration. . . . if properly implemented, would be invaluable. . . ."

602(3). "Teacher Corps, if properly implemented, is an excellent program."

603(1). "It will allow someone who is skilled in one type of thing not to be bogged down and to lose interest while waiting for slower students. It will allow a person to accomplish as much as possible. It also will give the slow student time to finish, as the old way would not have."

604(1). "This type of thinking and direction is, I feel, sorely needed to upgrade the quality of teachers, and hence, education in America today. The traditional modes should not, cannot, be clung to because they have 'sufficed' in the past. New direction is needed-- radical approaches must be given a chance."

605(1). "Perceptions due to the newness of the material will be somewhat limited. What impressions we must have with the seeming flexibility of competency-based teacher education. The idea of pacing and individual orientation of programs should hopefully result in greater overall teacher competency. This is certainly to the better."

606(1). "Competency-based teacher education seems to be a great improvement . . . reality orientation . . . flexibility of the program . . . students, in part, set their own schedules and work according to their own abilities . . . teaching in small groups . . . more well-rounded . . . emphasizes worth of teaching and abilities . . . encouraged to have more contact with students. . . ."

606(2). "The summer schedule was fairly good . . . two-week practice teaching went well . . . communication was bad . . . no competency-based aspects . . . impressed with the interns; depressed with some of the teachers. . . ."

606(3). " . . . education and deprivation course turned out well; other courses were mediocre . . . education courses were difficult to relate to, but passable; problems with the schools were more important (schools interns taught in) . . . there was not enough competency program. . . ."

607(1). "The competency-based programs are designed to permit the student to proceed through the program at the rate of speed which suits him best; and to allow him to spend more time working with children and less time listening to lectures on how to teach. I think these are excellent ideas."

607(2). "I think the preservice was poorly planned and there seemed to be a lack of concern on the part of several program administrators about personal problems . . . working in the schools will be a very valuable experience . . . favorably impressed by the attitudes of my team leader. . . ."

608(1). "It is an exceptionally significant value to emphasize the experience, performance and productivity of student-teachers rather than their responses from book-learning and hour-long lectures at the university."

608(2). "I have not as yet experienced the competency-based aspects of the program. The summer pre-service workshop was not of much worth to me. I am finding the actual classroom experience to be the best 'teacher.'"

608(3). " . . . the program is worthy of much merit, but there is always a need for improvement . . . better or closer communication is needed everywhere. . . ."

609(1). "I feel it's a trend in the 'right' direction--the idea of working at your own pace, the idea of having more personal contact with instructors, and the idea of having less lecturing. . . . The competency-based teacher education seems to be less competitive-based

in taking into consideration the uniqueness of each individual 'student teacher.'"

609(2). " . . . I enjoyed interacting with the other Teacher Corps interns . . . the summer program held little or no relevance outside the lab school. . . . Overall program, thus far, has been quite fragmented . . . fragmentation inhibits involvement . . . cooperative staff . . . progressive education, but not ideally progressive. . . ."

610(1). "These are truly exciting ideas . . . posttesting rather than pretesting . . . working out student's curriculum in modules . . . modules can be structured to fit the individual needs of the student . . . emphasis upon work done in the field . . . the entire program seems very realistic and should accomplish its goals well."

610(2). " . . . most worthwhile experience has been on-the-job training . . . optimistic and excited by the challenge of working with under-privileged children . . . extremely disgusted with the education courses . . . little voice in pre-planned classes. . . ."

610(3). "Have experienced little competency-based education. Education and deprivation was a step in the right direction; however, I saw little connection between pretest, posttest, and course content or evaluation. . . . poor communication . . . lack of training in pre-service concerning the nature of Teacher Corps. . . . dependence upon the Graduate School and particularly the College of Education for training interns."

611(1). " . . . By not yet experiencing its practical application I can only pre-judge the results. By focusing on the individual pupil (his ability to progress) seems to be a less restricted and more open means to education."

612(1). "I feel competency-based teacher education is very good . . . relieves pressure . . . more genuine enthusiasm for learning can be cultivated when pressure is not present . . . my education being traditional leaves me with a feeling of inadequacy. . . ."

612(2). "Very hard implementing a competency-based program in a largely traditionally operating system. . . . Main problem--lack of space and facilities . . . expectations are optimistic. . . ."

612(3). " . . . not enough of the competency-based ideas being used. . . . I have found this experience very valuable, regardless of failures of the program to come off as it read. . . ."

613(1). "If competency-based teacher education can really personalize learning for each student, it's great! Reality-based levels of competency, though, will be crucial. If kids are exposed to experiences important to them (to their lives) and are encouraged to take the route that leads them to a reality-based goal (at a pace harmonious to them), I'd really look forward to being in this program!"

613(2). " . . . I don't see any glimpses of a competency-based program . . . courses and professors have become more relevant and

interesting . . . I have found Teacher Corps to be as interesting, challenging and energy-consuming as I expected. . . . Working with children really tugs at one's creative energy . . . highly valuable and challenging. . . ."

613(3). " . . . little evidence of competency-based teacher education has shown up in any Teacher Corps-related course . . . lack of encouragement in preparing innovative programs . . . lack of guidance and relevant criticism . . . lack of space or facilities or 'static' involved . . . some monetary problems . . . expected more serious, philosophic, humanitarian, 1971 emphasis to teacher education. . . ."

614(1). " . . . more precise and actual examples of competency-based educational methods should be given. . . . The employment of the many educational areas and facilities enables the student to gain a more comprehensive knowledge of the learning process and its ramifications . . . greater emphasis on evaluating the students achievement at the end. . . ."

614(2). "Very disappointed--experienced little or no competency-based; expected quality instruction--received non-quality instruction."

615(1). " . . . I was conservative in my feelings for the new program only because I have not seen the product. This new approach will be pure hell on the incompetent teachers who are now in the classroom. Weeding these individuals out of the system will be as great a boon to education as the objectives themselves."

616(1). " . . . seems to be a more wide-open type of educational system. The idea of pass or fail has been done away with. Today the basic concept in education is leading toward more of a motivational structure than toward the idea of the grade a student receives."

616(2). "I experienced little or no competency-based teacher education in the three courses we had this summer . . . this can be alleviated by providing for the future Teacher Corps members to actually see this type of program working in the classroom. . . ."

616(3). "I do not feel the program has been effective because the teachers we worked with did not understand what the purpose of Teacher Corps was. . . . too many Teacher Corps people were used as substitute teachers . . . received little assistance from my teacher. . . ."

617(1). " . . . teacher education for too long has tended to cut teachers off from the community and even, perhaps, from students themselves. . . . I like the idea of focusing attention on exit requirements. . . . I especially like the idea of stressing performance and product criteria. . . ."

617(2). "I am really hoping for some improvement in instruction . . . I do feel that I am gaining valuable information and experience from my team leader . . . and from working at the school."

617(3). " . . . competency-based part of programs was worthwhile."

I have felt that the program as a whole is a good one . . . I have gained some invaluable experiences . . . have been fortunate in my placements. . . ."

618(1). "I feel that it is a very good start, and it's worth the try. A few problems, as in the present system, will amount to larger problems, but it seems well worth the effort to face them."

619(1). "This program would be difficult to use with large groups."

620(1). "I think the competency-based program sounds great. . . . would be great advantage to all students. I also feel it would be more rewarding to the teacher as well as more enjoyable to teach than the traditional programs. . . ."

620(2). "I have not as yet seen any examples of competency-based education. I really find teaching to be an enjoyable experience."

620(3). "I feel I have been introduced to the competency-based teacher education, but haven't experienced executing it."

621(1). " . . . I agree that personalization, individualization, and sensitivity are lay concepts and hopefully, realities. The module program described appears to utilize programmed instructional material to both individualize and personalize the learning experience . . . include a positive student evaluation of both his educational program and himself . . . establish more of a free learning situation in which the teacher becomes a reference. . . ."

621(3). "Have seen no competency-based teacher education . . . Teacher Corps is basically good, but too bad it is administered by the super conservative university, school board and federal government. Almost all attempts to change the existing muddle have been thwarted by one of the above institutions. . . ."

622(1). " . . . instructors are more interested in the financial gain they receive than teaching the student . . . the student should be informed as to what steps he should make in preparing his schedule. . . ."

622(2). "Pre-service training did not come up to my expectations . . . the reading instructor should have been better since we will be helping the deprived in the area of reading. . . ."

623(1). " . . . children must be treated as human beings . . . encourage creativity . . . substitute an 'open' classroom . . . movement and interaction are unrestricted . . . children collaborate on classroom procedures . . . discipline is a total class involvement. . . ."

623(2). " . . . little relationship between the goals on paper and Teacher Corps in reality . . . no team teaching, little coordination of curriculum, little opportunity for innovation . . . little say in policy making. . . ."

623(3). "No competency-based teacher education exists . . . a let-down--possibility of innovation is stifled by a hard line principal

and community expectations . . . Teacher Corps administration is non-supportive of interns in school's mistrust between interns and administration . . . excessive paperwork. . . ."

624(1). " . . . seem to open new avenues of getting to the real learning needs, which involve the ability to think--the ability to deal with the world in some rational manner. Competency-based teacher education leaves open opportunities unavailable within a more structured system."

624(2). "Competency-based teacher education is not, at this time, operative in the training program . . . I had expectations of better teachers and more innovative ideas coming forth . . . I believe I gained most from my interaction with them."

624(3). "Very poor--little concern for individual intern; little effort to relate."

625(1). "As I understand it, competency-based teacher education sets certain goals and provides means toward those goals, both of which may be chosen and arranged by the individual student . . . assumes the student is earnest, sensitive and perceptive to the program . . . hope it would result in a 'competent' teacher and guide his own teaching methods . . . it seems, at this point, to be encouraging and exciting."

625(2). "I have not seen any indications of competency-based education in our program . . . discussions with fellow interns was most useful in evaluating, revising, and solidifying my ideas . . . disappointed in all of the courses, except one . . . excited and challenged by interns and staff. . . ."

626(1). "I've gotten the impression that this competency-based teacher education stresses much activity by the pupil and as a result--an enthusiastic learner. There seems to be a freer and open spirit about the program and hopefully a more significant end result."

626(2). "I am still hazy about the competency-based program because our training this summer missed the point. I do feel good about the experiences I have had with the other Corps members and the two weeks spent teaching at the Lab School."

626(3). " . . . The program has been mediocre because of the education courses . . . if they were done away with; we could concentrate on our field, then the program would be more useful."

627(1). "Anything that can help the student I am in favor of, but these new trends should be tested thoroughly before being used on a wide scale."

627(2). "The past six weeks were very uninformative."

628(1). "Competency-based teacher education promotes more personal value to the student allowing him to work with greater freedom and at his own speed. . . . To benefit both the students and those served by the students, both programs should be used, the traditional program as more of a guideline."

628(3). "I don't feel that the student's effort is considered in this . . . well pleased even after some discouragement . . . don't always feel our contributions are recognized. . . ."

629(1). "The competency-based teacher education seems more relevant than the traditional type of almost total classroom instruction. However, until I would see this new method actually put into practice in a classroom situation with school children it would be difficult to comment further. Many new approaches appear fine in blueprint, but fail to work."

630(1). " . . . seems to be a somewhat innovative approach. . . . Any worthwhile evaluation on my part will have to wait until I have experienced competency-based teacher education rather than only having read about it."

631(1). "I agree with individual pacing and the opportunity for the student to design his own program. However, I would rather see even more freedom for the student in choice of subject area and method of study. I must admit that I am not 100% sure of this. . . ."

631(2). "We had no competency-based teacher education at all in our program . . . one of the disappointments is the courses. . . . I was really happy with our complaint sessions, but it seems that there is little follow-through. I am happy with my team leader and the teachers . . . they seem flexible and willing to try new things."

632(1). " . . . encourages individual interest and initiative . . . puts less emphasis on inter-personal competition with the result being individual satisfaction . . . seems to be directed towards the fulfillment of the personal experience goal. . . ."

632(2). "The three summer courses have proven to be, if not, totally irrelevant, at least inaccurate with regard to assessing our needs as we expressed them in class."

633(1). "I think the theory sounds pretty good, but the practice is still very traditional and irrelevant to the needs of present-day society and education."

633(2). "I am disappointed with the delivery of the courses required for teacher certification. . . . Teacher education cannot be effective if presented in the traditional classroom environment, where a number of students are expected to respond in a manner prescribed by one teacher whose philosophy of education is unacceptable to those students."

634(1). " . . . it puts student teachers in contact with students early. . . . I like the idea of stated objectives and stated criteria for completing the course. . . ."

634(2). "Competency-based teacher education so far is non-existent. . . . My feelings as a whole are fairly negative . . . greatly disappointed with the instruction in summer school. . . . extreme lack of communication."

635(2). "I didn't see or experience anything that fit the description of competency-based teacher education . . . had uncertainties and problems in organization. . . . capabilities and desires to work weren't satisfied. . . ."

636(2). " . . . classes are too large for a competency-based teacher education program . . . most of our students do not respond to an innovative program . . . my expectations were more idealistic. . . ."

637(2). "There ought to be some competency-based teacher education courses. I feel there is little concern for developing a well-designed program. There is less concern for my needs and individual differences. Some team leaders are not sincere and all school systems are not."

637(3). "Teacher Corps is not generally liked by 'professional educators' at the university or on local levels . . . the program is not very effective. Teacher Corps makes interns less radical and more compromising."

638(3). "University courses second semester were very bad, were better this summer because they were non-education courses . . . experience in the school was enlightening, satisfying, etc. Whole program--positive."

701(1). " . . . have exciting possibilities . . . attracted to increased personalization of the experience and added stress on improvement of ability to teach and to help children grow . . . spending more money so that student time is not squandered. . . ."

701(2). " . . . more time is spent in the schools doing tasks, but there may be just a programming of students . . . on the whole, I feel positively toward it . . . what I'm doing in the schools now is similar to my expectations. . . ."

701(3). "Competency-based aspect not well prepared enough to provide materials needed to complete packages . . . the program was more unstructured and chaotic than I expected . . . someone needed to take the leadership role. . . ."

702(1). " . . . appears to be highly flexible and adaptable . . . removes the burden on the entering student of having to be equal to his peers . . . allows students to work at their own pace . . . problems are: increased sums of money, increased amounts of individual attention to students by teachers and increased cooperation between all educational personnel. . . ."

702(3). "Somewhere in the endless torrent of competency-based programs, behavioral objectives, lesson plans, intra-staff conflicts, conflicting demands, image-maintaining, nit picking, and so forth, teaching kids seems to run a poor last."

703(1). " . . . most innovative . . . allows progress to be made at different rates for different students, the end product would seem to have at last been recognized as the goal. . . ."

703(2). "Within the concepts of the competency-based faction of our training, I feel the limited input of such aspects restricts me from further discourse. My expectations have been fulfilled concerning the Teacher Corps program as a whole."

704(1). ". . . great deal of emphasis is placed on practical learning in application situations . . . student acquires a better working knowledge of his field, and a greater confidence in his initial introduction to the field . . . less rigidity . . . less frustration of failure . . . sense of greater worth. . . ."

704(2). "I feel a lot of valuable time was wasted hashing and rehashing philosophy of education . . . too much time in human dynamics . . . the in-service has been excellent . . . positive comment about learning experiences with the kids and teachers . . . in-service is more realistic. . . ."

704(3). "Competency-based instruction is very satisfying. . . . If there is a weakness it is the slowness of the college to provide professional input when requested. My overall feeling is very positive."

705(1). "Competency-based teacher education is far superior to the traditional program . . . elimination of competition . . . advantages to the use of modules . . . independent study . . . research programs . . . practical education within the community. . . ."

705(2). "We have dealt very little in the competency-based program. I am enjoying the program and am learning a lot about children and education. I am pleased that we have quite a bit of freedom."

705(3). "I like the internship . . . allows interns to decide whether or not they want to work with young people . . . need cooperating teacher benefits for training . . . team leaders must spend time evaluating . . . college staff should be in schools at least two days per week . . . selling of Teacher Corps is mandatory before interns arrive. . . . Interns should meet with staff and community before Fall . . . interns making unqualified decisions as to directions of program . . . Teacher Corps should be one year undergraduate or two years with second year full certification at teacher salary."

706(1). ". . . offers the student a chance to motivate himself and work at his own pace--and possibly take time out for relevant learning which is not part of a specified module. . . ."

706(2). ". . . the experiences and educational knowledge I am learning since I've been in the schools has greatly encouraged me. I have had a few successes, a lot of failures, but am basically excited about the work in the school."

707(1). "All of this sounds like 'the new technology of educational data processing.' If this has anything to do with teaching survival to the 'underprivileged'--fine. Interdisciplinary curricula?"

707(2). "I feel I'm moving along at my own speed. . . . Is that a

competency-based program? My expectations have pretty much been in line with what's happening. . . ."

708(1). " . . . The call for involvement and relevance has been common among the colleagues with whom I participated at our university, yet I perceived little response . . . sounds very exciting . . . corresponds accurately to individual varieties. . . ."

708(2). "I feel very positive about the competency-based aspects . . . I need analyzation skill to be able to evaluate my own performance . . . I need feedback regarding my initial competency . . . would like more leadership by team leader."

709(1). " . . . appear realistic . . . it appears that the competency-based teacher education will require more funds . . . relocation of resources is wise . . . shared responsibilities are necessary . . . making participants realize strengths and weaknesses. . . ."

709(2). "Seventy-five percent frustration--twenty-five percent satisfaction. I need more input on all aspects of competency-based teacher education."

709(3). "It is better than traditional education. Expectations fulfilled."

710(1). " . . . I feel that a child should work at his own speed with a particular objective in view. . . ."

710(2). " . . . during the last three weeks, I strongly believe that competency-based teacher education is a great improvement. . . . Before the program, I really didn't know enough about it to formulate an opinion."

711(1). " . . . provides flexibility, redistribution of time, self-pacing, and the concept of student growth. It sounds like a tightly knit little theory which sounds good on paper, but I would be much more enthused if I knew more about both the advantages and disadvantages and could see some programs in operation."

711(2). " . . . So far we have had very little experience with the competency-based aspects of the program . . . the program far surpassed my expectations both in positive experiences and the commitment it has required. . . ."

711(3). "Because of the many other things that were important, the competency-based part may have not been given as much use as some might have liked . . . problem with interns becoming better informed about the communities they are entering, and those communities getting more advanced information about what Teacher Corps is and wants to be."

712(1). " . . . adaptable to individualization . . . problem with this are: making objectives relevant, pressure from outside the educational system to complete one's education. . . ."

712(2). " . . . the program isn't allowing for individualization

in terms of time allowed to acquire a particular skill . . . I found much more freedom than I expected . . . I also found myself wanting to be more involved with the program and people before I entered pre-service. . . . Working with kids is turning me on. . . ."

712(3). " . . . too many foci. . . ."

713(1). "Competency-based teacher education is inevitable. . . . If a new personalization approach is not instituted to gap the knowledge discrepancies between students and teachers, there will be no one in the schools. Can you program out the internal mental fight a student has developed?"

713(2). "I have been able to implement my own program and ideas. I'm still skeptical whether any standardized program (including ComField) can really produce 'good teachers.' My expectations were high in the beginning; therefore, the freedom I have obtained sufficiently fills my expectations."

714(1). "It seems ironic that a program which aims at improving teaching techniques and learning skills should overlook the importance of simplicity in the use of terms. Many features of the competency-based program, however, do seem to be desirable; especially the decrease in emphasis on large lectures."

714(3). "I feel that an extended field-centered experience is very effective in terms of teacher training. I don't believe that we are, however, a competency-based program in terms of the ComField Model."

715(1). "Theoretically, the competency-based approach sounds good. Without the greater exposure to students, a prospective teacher cannot assess his fitness for the field of education. . . . I question just how much depth he will have if the greater time allotment for education-based seminars becomes a reality in his curriculum."

715(2). "Generally, the experiences with the children have been very rewarding. I really had few expectations for this program--so my evaluation would be premature. . . ."

715(3). "Competency-based aspects are very weak. . . . Because it has been presented poorly, I think we have a negative bias . . . I am very disappointed . . . problem areas: lack of individualization, lack of clearly defined roles and responsibilities, lack of trust and honesty between all individuals, need for more extensive preparation in academic areas. . . ."

716(1). " . . . desperately needed and welcomed . . . new trends indicate to me a re-evaluation of priorities . . . less stress on the time variable . . . more emphasis on exit requirements . . . greater personal involvement . . . utilization of technology in a sane and progressive manner. . . ."

716(2). " . . . I have no strong feelings about competency-based aspects . . . I would say that Teacher Corps hasn't really deviated from my pre-intern expectations and projections. . . . basically it is fairly positive. . . ."

716(3). "Actual experience with students in an academic environment has been scarce due to conflicts with staff and lack of cooperation . . . constructive planning of activities, statement of objectives for pupils and diagnostic testing has been helpful. . . . same problem exists--communication. . . ."

717(1). "Relevancy seems to be a problem here--for who determines the competencies to be acquired? More emphasis should be placed on criteria other than knowledge, product and performance, especially when working with economically underprivileged children. Competency tests are still tests, and, therefore, are open to the problem of one group testing another as to what the testing group feels is relevant."

717(2). "I feel unqualified to even make an objective judgment about it . . . up through the end of pre-service I was quite enthused about the program as a whole, but since beginning work in the school, I have become increasingly frustrated in my attempts to deal with the very traditional program in which I find myself. . . ."

717(3). "We still have not experienced many aspects of competency-based teacher education. I feel it has little place in a program where people are trying to become teachers by actual experience in the field."

718(1). "Disadvantages seem to be: the majority of teachers come from the traditional situations, and carry its baggage. To expect them to switch quickly is expecting a lot; in an unstructured situation, the success rests heavily on the group involved--staff and students. . . ."

718(2). " . . . I have liked being immersed in field experience, if that's what the essence of ComField program is all about. . . . feelings are good. . . ."

718(3). " . . . I feel positive and thankful for having a program which is 95% competency-based. I have good feelings about the program. Time is only problem area. A few more resource workshops would have been beneficial. . . ."

719(1). " . . . Emphasis upon student's time extension and the evaluation of the end student product is most interesting. This would probably be the ideal circumstances but does the reality of limited time and space allow such a circumstance to exist? . . ."

719(2). "Have not had a chance to employ this method as of yet . . . my experiences have been what I expected--tremendous (I have been with grades 1-6 and know just about all of them)."

720(1). " . . . Self-pacing and the personalization of instruction has tremendous worth. The most valuable aspect is the utilization of instructional modules with its regard for student time and because it provides for a great diversity of learning experience at one time. . . ."

720(3). "Competencies wanted or needed to be met are not developed. Learning packages not developed and materials not accessible. . . . Expected it to be out of middle America. . . . No chance to really do much, no opportunity given this year, expect more next year."

721(1). " . . . provides challenge, variety, time, and achievement . . . should be more personal . . . takes away mounting pressures of performance . . . more confidence . . . achievement more satisfactory. . . ."

721(2). "We have still not gotten far into the ComField program. . . . Have had good feelings about program. Learning experiences have been great--meaningful. The experiences with children have been exciting and educational."

722(1). " . . . Setting objectives as to attitudes and understandings on a subjective level is risky business in imposing personal value systems. The ideal in my mind would be to create an environment of exploring possibilities without directly teaching anything--only providing materials, equipment and personal assistance to enable individual and corporate creativity. . . . not enough allowance for 'free play.' . . ."

722(2). " . . . Most of my time has been spent in participation--observation--no time for research, resource and input. Retracting out of 'full-time teacher' to several areas of focus (1) I have more energy left for reflection, (2) more time for constructive planning and (3) more time for learning as I teach; no expectations--all is good!"

722(3). "Resources not made available; more mini-method courses needed; public relations work was a total failure; supportive climate was not developed. At this point, my comment on Teacher Corps is that it is a 'glorified student teacher experience of two years'--wholesale kow-towing is okay for two and one-half months, but two years gets to be a strain."

723(1). "The new trends are similar to the traditional methods in that a set of requirements are still specified. While the new methods seem to make more sense, I think it is necessary to determine if a set of requirements are needed and if so then how they will be formulated and how rigidly they will be adhered to."

723(2). "I feel unable to discuss the competency-based aspects of the program, since I feel we haven't had any as yet. Now that I am in the district, I feel more positively about the Teacher Corps program."

723(3). " . . . have learned much. My work in the district has been much more rewarding than I expected . . . I would criticize the college for failure to supply us with enough classes, seminars, etc., relating to teaching methods."

724(1). "In general I'm quite optimistic about the trends in education. I'm especially pleased to see more and more emphasis placed on the student and his needs as opposed to so much emphasis being placed on learning achievement. I think learning can only be facilitated by this new trend."

724(2). "I feel a definite need to respond to this request, but am unable at this time to articulate my feelings on the subject."

725(1). " . . . My feelings are positive. . . . require more money for instructional materials . . . attitude of the school and teachers is important . . . teachers must want to spend much time implementing the programs. . . ."

725(2). " . . . I am just uncertain and hopeful. Still rather skeptical about competency-based curricula in this community, unless we start a team teaching experiment. Some experiences have been frustrating, some hopeful, some fun. I don't want to evaluate ComField until later."

726(1). " . . . greater emphasis upon the fact that the purpose of teaching is learning by the student . . . children are being elevated to a much higher role in the education process . . . the movement is to a student-centered education process. . . ."

726(2). "Competency-based aspects should be increased. . . . In-service program has thus far been highly stressful as we (interns) have attempted to: (1) set goals, (2) allocate time to the various elements of the program, (3) make sense of the wide variety and quantity of input stimuli, and (4) be a VISTA, change agent and experimental teacher training program. . . ."

726(3). "What competency-based aspects? I think experience-based/limited college classwork plus outside community experience plus outside reading plus peer interaction and reflection plus introspection . . . lack of awareness by college staff . . . failure of interns to recognize realities of some school situations."

727(3). "Frustrating, Exhausting, Exhilarating, Fascinating."

728(2). "I have had some negative learning experiences as a result of a couple of incompetent instructors. The administration of the program has been poor. . . . have experienced extreme frustration. . . . The three-fold curriculum-college education, student teaching, and community work is too overwhelming and cannot be accomplished with competency in all three areas given the twenty-four-hour day. . . . would have been more realistic to confine the curriculum to the first two areas. . . ."

728(3). "In this particular program there is no applicable method of observation that will insure that a person has or has not achieved a certain level of competency. . . ."

Intern Ratings Regarding Competency-Based Teacher Education

As with the comments presented in the previous section, the data which are reported here were collected from interns at three different times: (1) prior to or at the very beginning of preservice training, (2) just after or near the end of preservice training, and (3) near the end of the first year of inservice training. Indeed, the same questionnaires were used to solicit the previously reported intern comments and these data regarding the intern ratings of (1) traditional teacher education programs, (2) competency-based teacher education programs, (3) the competency-based aspects of their programs, (4) their programs in general, and (5) their knowledge about competency-based teacher education.

Prior to the administration of the questionnaires during the first testing session, a brief slide-tape presentation--thirty slides and a twenty-minute audio-tape--comparing traditional and competency-based teacher education programs was presented. These materials were not in the other two testings. The directions and the rating scales from the questionnaire used in the first testing are presented below:

"Using the rating scales below, please indicate your feelings about competency-based teacher education as described in the materials you have just seen and heard as compared to traditional programs as you perceive them by circling that number on each scale which best describes those feelings."

Traditional Program	1	2	3	4	5	6	7	8	9
	Very Negative								Very Positive
Competency-Based Program	1	2	3	4	5	6	7	8	9
	Very Negative								Very Positive

The directions and the rating scales used in the second and third testings are presented below:

"Using the rating scales below, please indicate your feelings about: (1) traditional teacher education programs as you presently perceive them, (2) competency-based teacher education as it would be in a program which is fully developed and operating, (3) the competency-based teacher education aspects of your program which you have experienced, and (4) the total educational experience you have had thus far in your program.

Traditional Program	1	2	3	4	5	6	7	8	9
	Very Negative								Very Positive

Ideal	1	2	3	4	5	6	7	8	9
Competency-Based Program	Very Negative								Very Positive
Competency-Based Aspects of Your Program	1	2	3	4	5	6	7	8	9
	Very Negative								Very Positive
Your Total Program	1	2	3	4	5	6	7	8	9
	Very Negative								Very Positive

"Please rate yourself regarding the level of knowledge about the notions of competency-based teacher education that you feel you have."

Your Knowledge Level	1	2	3	4	5	6	7	8	9
	Very Negative								Very Extensive

The seven tables which follow present the results obtained from use of the rating scales, that is, the tables provide the following: (1) mean scores obtained from all interns from a program who responded to a particular item (perceptions of traditional programs, perceptions of ideal competency-based program, perceptions of competency-based aspects of his own program, perceptions of his total program, and perceptions of his knowledge about competency-based teacher education) at a given testing (1: pre-preservice; 2: post-preservice; and 3: post-inservice); these scores are found under the heading Mean Score¹; and (2) mean scores obtained from only those interns who responded to a particular item at each testing (pre-preservice, post-preservice, and post-inservice or post-preservice and post-inservice; these scores are found under the heading Mean Score². Because of the nature of this study, no statistical analysis is provided here. However, a rather brief explanation of the findings relevant to each program is presented.

Table 1

Mean Scores Obtained from Jackson State College Intern
Ratings Regarding Competency-Based Teacher Education

Item	Testing	N	Mean Score ¹	N	Mean Score ²
Traditional Programs	1	35	3.71	27	3.63
	2	32	3.66	27	3.48
	3	28	4.43	27	4.41
Ideal C-B Program	1	35	7.46	27	7.33
	2	32	7.06	27	7.04
	3	28	7.50	27	7.56
C-B Aspects of Program	2	32	5.72	27	5.70
	3	28	6.25	27	6.37
Total Program	2	32	6.25	27	6.26
	3	28	6.36	27	6.33
Knowledge About C-B	2	29	5.72	24	5.67
	3	28	6.79	24	6.75

In light of the data reported above, it seems reasonable to make the following brief, tentative conclusions regarding the perceptions of interns at Jackson State College. For the purpose of this and subsequent discussions in this section, reference will be made only to those responses which were of the "pre-post" kind; that is, only the data reported in the Mean Score² column are examined.

Interns had much more favorable perceptions of an "ideal competency-based program" at all three testings (7.33, 7.04, and 7.56) than they had of "traditional programs (3.63, 3.48, and 4.41). Indeed, they also viewed the "competency-based aspects of their program" (5.70 and 6.37) and their "total program" (6.26 and 6.33) somewhat more positively than "traditional programs." In addition, they saw themselves as rather knowledgeable about competency-based teacher education (5.67 and 6.75). In summary, then, interns at Jackson State College held rather negative views toward traditional programs, quite positive views toward competency-based programs, and somewhat positive views toward competency-based aspects of their program and their total program. That they view the notion of competency-based instruction more positively than more traditional approaches seems clear.

Table 2

Mean Scores Obtained from Oakland University Intern Ratings
Regarding Competency-Based Teacher Education

Item	Testing	N	Mean Score ¹	N	Mean Score ²
Traditional Programs	1	25	3.44	18	3.72
	2	32	3.09	18	3.28
	3	28	2.86	18	3.22
Ideal C-B Program	1	25	7.72	18	7.72
	2	32	7.71	18	7.56
	3	28	7.93	18	8.06
C-B Aspects of Program	2	15	6.20	13	6.15
	3	28	6.67	13	6.15
Total Program	2	15	6.66	13	6.00
	3	28	6.82	13	6.08
Knowledge About C-B	2	15	6.26	13	6.38
	3	28	7.14	13	7.31

The data presented in Table 2 suggest a pattern of Oakland University intern perceptions which is quite similar to that reported for interns at Jackson State. That is, interns perceived "traditional programs" quite negatively (3.72, 3.28, and 3.22) while viewing "competency-based programs" very positively (7.72, 7.56, and 8.06). And they saw the "competency-based aspects of their program" (6.15 and 6.15) and their "total program" (6.00 and 6.08) in a positive light. They also saw themselves as quite knowledgeable about competency-based instruction (6.38 and 7.31). The difference between their perceptions of traditional and competency-based programs again indicates that they were much more positive toward competency-based instruction.

Table 3

Mean Scores Obtained from San Francisco State College Intern
Ratings Regarding Competency-Based Teacher Education

Item	Testing	N	Mean Score ¹	N	Mean Score ²
Traditional Programs	1	33	2.88	18	3.00
	2	30	2.43	18	2.33
	3	34	3.12	18	3.33
Ideal C-B Program	1	33	8.18	18	8.33
	2	30	7.37	18	7.39
	3	34	6.91	18	6.67
C-B Aspects of Program	2	30	5.87	26	5.81
	3	34	5.12	26	5.31
Total Program	2	30	5.17	26	5.15
	3	34	5.38	26	5.73
Knowledge About C-B	2	30	5.37	24	5.29
	3	32	5.69	24	5.63

Responses from San Francisco State College interns indicate very negative feelings about "traditional programs" (3.00, 2.33, and 3.33) and very positive feelings about "competency-based programs" (8.33, 7.39, and 6.67). The data, therefore, suggest a very marked difference of feelings toward the two approaches with their views concerning competency-based approaches being the much more positive. With regard to their feelings about the "competency-based aspects" of their program (5.15 and 5.73), interns were only slightly positive. Even so, the mean scores in those two categories were substantially higher than those obtained relevant to traditional programs. Mean scores of 5.29 and 5.63 suggest that interns viewed themselves as having somewhat limited knowledge about competency-based instruction.

Table 4

Mean Scores Obtained from State University College at Buffalo
Intern Ratings Regarding Competency-Based Teacher Education

Item	Testing	N	Mean Score ¹	N	Mean Score ²
Traditional Programs	1	38	3.21	28	3.18
	2	36	2.78	28	2.61
	3	31	3.52	28	3.32
Ideal C-B Program	1	37	7.08	27	7.00
	2	36	6.97	27	7.00
	3	31	6.19	27	6.00
C-B Aspects of Program	2	36	5.56	28	5.61
	3	31	4.09	28	3.86
Total Program	2	36	5.94	28	5.82
	3	31	5.13	28	4.93
Knowledge About C-B	2	36	5.42	28	5.50
	3	31	5.39	28	5.29

The feelings expressed by interns in the State University College at Buffalo program were somewhat different from those reported thus far. While they too viewed "competency-based programs" (7.00, 7.00, and 6.00) more positively than they did "traditional programs" (3.18, 2.61, and 3.32), intern views toward the "competency-based aspects" of their program (5.61 and 3.86) and their "total program" (5.82 and 4.93) fell from slightly positive to slightly negative over the inservice period. As with the San Francisco State College interns, however, their perceptions relevant to their program and its competency-based aspects were more positive than their perceptions of more traditional approaches. In addition, interns did not view themselves as being very knowledgeable about competency-based approaches (5.50 and 5.29).

Table 5

Mean Scores Obtained from Texas Southern University Intern
Ratings Regarding Competency-Based Teacher Education

Item	Testing	N	Mean Score ¹	N	Mean Score ²
Traditional Programs	1	33	3.27	14	3.71
	2	32	2.25	14	2.43
	3	18	3.67	14	3.57
Ideal C-B Program	1	33	7.70	14	7.71
	2	32	7.59	14	7.93
	3	18	7.17	14	7.36
C-B Aspects of Program	2	32	5.47	15	5.73
	3	18	5.39	15	5.47
Total Program	2	32	5.47	15	5.60
	3	18	4.78	15	4.67
Knowledge About C-B	2	32	5.28	15	5.20
	3	18	6.11	15	6.20

The pattern of mean scores obtained from the Texas Southern University interns are quite similar to those reported for the State University College at Buffalo interns. Interns perceived the "ideal competency-based program" (7.71, 7.93, and 7.36) more positively than they perceived "traditional programs" (3.71, 2.43, and 3.57). In addition, intern perceptions of the "competency-based aspects" of their program (5.73 and 5.47) and of their "total program" (5.60 and 4.67) were very slightly positive or rather neutral but those perceptions were clearly more positive than the perceptions they had of traditional programs. Mean scores obtained relevant to their perceived level of knowledge about competency-based teacher education indicated an increase over the inservice period (5.20 and 6.20); at the end of the first year of inservice interns somewhat knowledgeable about the concept.

Table 6

Mean Scores Obtained from Western Kentucky University Intern
Ratings Regarding Competency-Based Teacher Education

Item	Testing	N	Mean Score ¹	N	Mean Score ²
Traditional Programs	1	34	3.45	24	3.33
	2	27	2.67	24	2.67
	3	28	2.43	24	2.42
Ideal C-B Program	1	34	7.34	24	7.42
	2	27	7.35	24	7.58
	3	27	7.96	24	8.13
C-B Aspects of Program	2	21	2.68	19	2.58
	3	26	5.31	19	5.05
Total Program	2	26	4.31	24	4.33
	3	25	5.72	24	5.75
Knowledge About C-P	2	26	4.50	24	4.50
	3	25	5.56	24	5.63

Interns at Western Kentucky University felt very negative about "traditional programs" (3.33, 2.67, and 2.42) and felt quite positive about an "ideal competency-based program" (7.42, 7.58, and 8.13). In spite of these very positive perceptions of the competency-based approach in the ideal, interns viewed the "competency-based aspects of" their program very negatively following preservice training (2.58). However, by the end of the first year of inservice, their ratings had become more positive (5.05) but were still quite neutral. Unlike interns in any of the other programs, the Western Kentucky University interns saw their "total program" in a more positive light than the "competency-based aspects" of their program at the end of preservice (4.33 as compared to 2.58) and at the end of the first year of inservice (5.75 as compared to 5.05). This suggests that interns were very positive about the concept of competency-based instruction but were much less positive regarding the operationalization of that concept in their own program. With regard to knowledge about competency-based teacher education, interns rated themselves as having only moderate knowledge (4.50 and 5.63).

Table 7

Mean Scores Obtained from Western Washington State College Intern
Ratings Regarding Competency-Based Teacher Education

Item	Testing	N	Mean Score ¹	N	Mean Score ²
Traditional Programs	1	26	2.88	20	2.95
	2	28	2.18	20	2.15
	3	22	2.68	20	2.55
Ideal C-B Program	1	26	6.92	20	6.70
	2	28	7.04	20	6.75
	3	22	6.86	20	6.80
C-B Aspects of Program	2	28	5.32	22	5.05
	3	22	5.05	22	5.05
Total Program	2	28	6.36	22	6.18
	3	22	5.82	22	5.82
Knowledge About C-B	2	28	3.96	22	3.59
	3	22	5.68	22	5.68

Western Washington State College interns perceived "traditional programs" very negatively (2.95, 2.15, and 2.55) and "competency-based programs" rather positively (6.70, 6.75, and 6.80). Again, the data indicate a rather marked difference of perception regarding these two approaches to the education of teachers; as with each of the other programs, competency-based programs were much more favorably perceived. Intern perceptions of the "competency-based aspects" of the program were rather neutral (5.05 and 5.05) while those concerned with the program as a whole were a bit more positive (6.18 and 5.82). Mean scores obtained relevant to intern perceptions of their knowledge regarding competency-based instruction indicated that they felt they had grown in their understanding during the inservice period (3.59 as compared to 5.68).

In summary, then, it seems relatively safe to suggest that the following are reasonable conclusions: (1) clearly the interns tested had much more positive perceptions concerning competency-based teacher education than they had concerning traditional approaches; mean scores obtained for competency-based programs ranged from 6.00 to 8.33 while those obtained for traditional programs ranged from 2.15 to 4.43 indicating a rather marked difference in perceptions; (2) except in the case of two programs, interns had a somewhat neutral or slightly positive view of the competency-based aspects of their own programs; (3) for the most part, interns had a rather neutral or somewhat positive perception of their programs as a whole; and (4) by and large, interns felt reasonably knowledgeable regarding competency-based teacher education.

Intern Attitudes Toward Teaching

As a part of the test battery administered to interns they were asked to respond to the Teaching Situation Reaction Test. The TSRT was developed by J. K. Duncan and J. B. Hough at The Ohio State University in 1966; the form used here was a modification developed and widely used in the Cooperative Urban Teacher Education Program of the Mid-continent Regional Educational Laboratory. Studies reported by the authors and others suggest that the TSRT is valuable in predicting teacher performance; these include subject matter competence, teacher-pupil relationships, classroom management, and human relation skills.

The TSRT is a forty-four item, paper and pencil test which poses a general teaching situation. Each of the items poses a problem situation to which the student is asked to rank the four optional courses of action which are presented. These problem situations include planning, handling restless students, dealing with pupil-pupil conflicts, working with shy students, and so forth. The following items illustrate the testing format:

After meeting your class four times, you notice several things: Two boys seem particularly dirty; one girl seems to be withdrawn--the students do not pay any attention to her, although she is a pleasant looking, well-dressed girl; there are four or five youngsters, apparently very good friends (both boys and girls), who do most of the talking and take most of the initiative; and students seem to continually interrupt each other and you.

14. In the interests of the two boys who are especially dirty you would:

- (a) find an opportunity to discuss the matter of cleanliness with the class.
- (b) speak to the boys about their need to be clean in a conference with them.

- (c) inaugurate a cleanliness competition with a prize to that half of the class with the best record, putting one boy in each half.
 - (d) speak to the boys about their need to be clean and arrange facilities at school where they could clean up.
15. In the interests of the apparently withdrawn girl, you would:
- (a) talk to her informally over a period of time to see if you could determine her difficulty.
 - (b) call on her regularly for contributions to the discussion.
 - (c) discover a skill she has and have her demonstrate for the class.
 - (d) have a conference with her and tell her to become involved with the class discussion and speak up.
16. To improve the relationship of your class to the apparently withdrawn girl, you would:
- (a) determine who, if anyone, is friendly with her and arrange to have them work together on occasion.
 - (b) take the girl aside and help her see how she can establish better relations with her classmates.
 - (c) arrange to have her work with the group of boys and girls who take most of the initiative.
 - (d) allow her to work out her own problem.
17. With regard to the four or five youngsters who do most of the talking and take the initiative, you would tend to believe:
- (a) they are brighter than most of the other students.
 - (b) they are the leaders of the class.
 - (c) there is considerable variation in student's ability to participate in class.
 - (d) they are a little too cocky and think they know more than the others.
18. With regard to the tendency of class members to interrupt while others are talking, you would:
- (a) tell your class politely but firmly that interruptions are impolite and should not continue.
 - (b) discuss the matter with your class, determining why this happens and what should be done about it.
 - (c) organize a system of hand raising and set rules for students participation in discussion.
 - (d) set rules for student participation in discussion and firmly but fairly reprimand each person who breaks the rules.

Responses were scored according to a key; that is, the discrepancy between intern rankings and the key rankings was determined for each item. Thus, total agreement between the key and an intern's ranking of the options provided for any one item resulted in a score of 0 while total disagreement resulted in a score of 4. Consequently, the range of possible total scores was 0 (total agreement on every item) to 176 (total disagreement on every item). Therefore, the lower the score, the more competent the intern would be said to be with regard to subject matter competence, teacher-pupil relationships, classroom management, and human relations. The mean scores obtained from interns are presented in Table 8 below:

Table 8
Mean Scores Obtained from Intern Responses
to the Teaching Situation Reaction Test

Program	Testing	N	Mean Score ¹	N	Mean Score ²
Jackson State College	1	34	99.62	29	99.93
	2	33	99.36	29	99.52
	3	30	100.13	29	99.59
Oakland University	1	24	97.54	17	97.71
	2	30	99.53	17	100.06
	3	27	96.63	17	96.82
San Francisco State College	1	31	93.29	15	92.67
	2	29	93.48	15	92.80
	3	34	89.29	15	89.47
State University College at Buffalo	1	36	93.78	23	93.30
	2	31	92.32	23	91.48
	3	31	94.14	23	93.83
Texas Southern University	1	30	98.47	13	102.62
	2	32	92.52	13	96.38
	3	18	96.72	13	93.46
Western Kentucky University	1	34	93.16	21	92.24
	2	26	92.25	21	90.86
	3	27	89.00	21	89.33
Western Washington State College	1	26	91.23	18	90.50
	2	22	90.04	18	89.50
	3	22	87.50	18	86.00

Because of intern "attrition" and the refusal of some interns to respond to the TSRT, those from whom data were obtained did not constitute a representative sample. Consequently, no statistical

analyses were computed. However, the following observations do seem reasonable albeit somewhat tenuous with regard to the "pre-post" data. Although marked differences appeared in only two programs, in six of the seven programs intern response mean scores were lower--"better"--at the end of the first year of inservice than at the beginning of preservice. In addition, in three of those cases, scores were also lower at the end of preservice than they were at the beginning of preservice. With regard to the seventh program, the increase was quite slight. Overall, it does appear appropriate to suggest that, by and large, interns did improve slightly over time. This slight improvement does not seem important until one considers the research which indicates that student teachers--a group comparable to the interns--very often become significantly more negative in their attitudes during student teaching--an experience comparable to the internship. In other words, slight improvement seems important when viewed in the light of the more usual finding--more negative attitudes after the field experience.

Intern Attitudes Toward Low-Income, Minority Persons

The final part of the test battery administered to interns was the Cultural Attitude Inventory. The CAI as used here was a greatly modified version of a Likert-type attitude scale developed by Dorothy J. Skeel at Pennsylvania State University in 1965 and widely used by the Cooperative Urban Teacher Education Program of the Mid-continent Regional Educational Laboratory. To the fifty items of Skeel's scale were added eighty-three similar items developed at San Francisco State College. A 133-item form of the scale was administered during the first testing; through item analysis procedures the scale was reduced to forty items. It was this forty-item form of the scale which was used in subsequent testings; data reported here are from that form.

Interns were asked to "strongly agree," "agree," "undecided," "disagree," or "strongly disagree" with each of forty statements. The scoring procedure was to assign a score of 5 for a "correct response" to an item (strongly agree or strongly disagree depending upon how the item was keyed); a score of 4 was given for the next nearly correct response and so on. Therefore, the range of possible total scores was 40 (a score of 1 on each of the forty items) to 200 (a score of 5 on each) with a higher score indicating a more positive attitude toward low-income minority persons. Several sample items are presented below; Table 9 on the next page presents the mean scores obtained from interns with regard to the CAI.

6. Parents of children from low income and/or minority families are not interested in education.
8. The values of low income and/or minority children are to be ignored and middle class values imposed upon them.
16. Low income and/or minority background places a ceiling on a child's achievement potential.

Table 9

Mean Scores Obtained from Intern Responses
to the Cultural Attitude Inventory

Program	Testing	N	Mean Score ¹	N	Mean Score ²
Jackson State College	1	35	146.60	30	147.83
	2	33	154.76	30	155.34
	3	30	157.20	30	157.20
Oakland University	1	25	159.75	17	152.88
	2	30	164.40	17	162.47
	3	27	167.48	17	168.18
San Francisco State College	1	33	166.61	18	168.06
	2	30	171.67	18	174.67
	3	34	174.38	18	176.56
State University College at Buffalo	1	39	164.36	29	164.86
	2	36	171.03	29	170.52
	3	32	167.13	29	167.00
Texas Southern University	1	32	153.75	12	156.25
	2	32	169.84	12	170.75
	3	18	165.28	12	174.17
Western Kentucky University	1	34	158.76	23	160.30
	2	27	164.14	23	166.70
	3	28	167.46	23	169.43
Western Washington State College	1	26	167.88	20	169.90
	2	28	171.46	20	173.30
	3	22	175.91	20	177.05

As with the TSRT data, the CAI data should not be considered as coming from a representative intern sample. Thus, no statistical analyses were performed. However, several brief observations regarding the "pre-post" scores--Mean Score² data--appear appropriate although perhaps tenuous. In all seven programs, intern mean scores were higher at the end of the first year of inservice than they were at the start of the preservice period. And in all but one program, it was also the case that mean scores were higher at the end of the preservice period than at the beginning. This suggests that during their internship, interns became somewhat more positive in their attitudes toward low-income, minority persons. That this is the case is all the more meaningful when it is noted that intern attitudes were quite positive initially. Given the goals of Teacher Corps, this seems an important finding.

Intern Perceptions at Western Kentucky University

A ten-item opinionnaire regarding the interns' attitudes regarding competency-based education and the Teacher Corps Program at Western Kentucky University was developed by the evaluation staff. That instrument was administered during the Spring semester, 1970-71 school year.

Interns were asked to indicate whether they "strongly agree" (5), "agree" (4), "undecided" (3), "disagree" (2), or "strongly disagree" with each of the following statements:

1. Competency-based education is superior to traditional education.
2. Competency-based instruction places less pressure on me as a student.
3. I feel that I can achieve more and learn more from competency-based instruction.
4. I believe I will receive higher grades in competency-based instruction.
5. Competency-based education is realistic.
6. Involvement in the Teacher Corps will help me to be a better teacher than if I had completed a traditional program.
7. My classroom experiences at Western are worthwhile.
8. The classroom experiences at the school where I teach are very valuable.
9. The Teacher Corps program in general is a "good" program.
10. The students are benefiting the most from the present Teacher Corps Program.

The responses obtained from interns are reported in the brief summary which follows.

Intern responses indicated that they "agreed" that competency-based education is superior to traditional education. This agreement was expressed by a mean of 3.83 on a 5 point scale where 4 points represented "agreement." A mean score of 3.57 indicated that interns felt that competency-based instruction places less pressure on them as a student. And their responses yielded a mean score of 3.78 indicating that they felt they learned and achieved more from competency-based education.

A mean score of 3.25 suggested that interns tended toward undecidedness when asked if they would receive higher grades in competency-based instruction.

A mean score of 3.68 indicated that interns agreed that competency-based education is realistic. When asked if their involvement in Teacher Corps would make them a better teacher than if they had completed a traditional program, intern responses yielded a mean of 4.04 indicating agreement. In reference to their classroom experiences at Western being worthwhile, a mean of 3.71 was obtained; this indicated a fairly high degree of agreement. A mean score of 4.61 indicated that interns place high value on their teaching experiences. The Teacher Corps Program in general was seen as a "good" program as a mean response of 3.84 was obtained. A mean response of 3.43 suggested that interns saw students as benefiting most from the Teacher Corps Program; this indicated a response which was only slight agreement.

In short, the data obtained from interns suggested that they were--to varying degrees--in agreement with each of the statements made; (the mean score range was 3.25 to 4.61 on a five point scale). This indicates a rather positive overall feeling toward competency-based instruction and the program.

Student Perceptions at Jackson State College

The following is an abstract of a brief report prepared by Dr. Lee Napier, Program Development Specialist for the Jackson State College Teacher Corps Program. It is a summary of a study he conducted which examined the perceptions regular graduate and undergraduate students of Jackson State College students held regarding competency-based instruction.

During the academic year of 1970-71 graduate and undergraduate students who were exposed to competency-based instruction were given questionnaires to assess their understanding and feelings about competency-based instruction and traditional instruction.

The following section is a summary of the reactions of these students.

The students were asked to compare competency-based education with traditional instruction by rating them, both on a five point scale from very negative to very positive. The graduate students rated competency-based instruction (4.0) higher than traditional instruction (3.2), while the undergraduates gave the edge on the rating to competency-based instruction (4.5) as compared to traditional instruction (3.1). The graduate students and the undergraduates both gave the specifications as they were written a 4.2 on the same scale. The knowledge of a specific behavior to exhibit was ranked 4.2 by the graduate students and 4.6 by the undergraduate students. Both groups of students also reacted positively to setting a criterion of acceptance (graduates: 4.0 and undergraduates: 4.2).

In response to the question: "What do you like most about competency-based instruction?" graduate students made two major points: (1) the

freedom from classroom instruction encourages initiative and independence, and pre-tests enable students who have the ability to advance on their own without being restricted by slower classmates. Comments from undergraduate students emphasized the following: (1) the student has an opportunity to express himself freely and to work on his own through independent study and research since the objectives are clearly stated and known to all from the beginning of the course; (2) one can learn at his own rate and doesn't feel pressured because he can set his own pace; (3) dull classroom lectures and sessions are eliminated because the student can pass the pre-test if he already knows the material; and (4) interest was, therefore, high during class sessions and group participation was especially good.

To the question "What do you like least about competency-based instruction?" the most critical view expressed by the graduate students was the possibility of missing pertinent information in class discussions if students did not take the treatment--did not opt to engage in the instructional activities made available. In this regard, many students expressed no negative feelings at all; several stated that it was the best form of teaching they had been exposed to. Others said that the thing they disliked most was that competency-based instruction was not offered in other departments. Several students noted difficulty in obtaining the limited number of reserve books from the library. Some students also felt that the examination period should have been longer so that responses could have been more complete and writing more unhurried; this situation was later remedied.

In response to the question "At this point which method do you prefer, traditional instruction or competency-based instruction?" three graduate students indicated that they favored traditional teaching because they felt old methods are best and believe that there would be less testing under this method. On the other hand, sixteen graduate students preferred the competency-based method because it is more interesting and gives an opportunity for independent study. The traditional method was favored by few undergraduate students; they felt that they got more out of this approach. The remainder of the undergraduate students favored competency-based instruction. They felt that a better understanding of the subject matter was achieved and that objectives were effective and precise, giving them an opportunity to make higher grades. They felt that they were given a feeling of confidence and independence and could learn more than they would under the traditional method. They especially enjoyed the opportunity to help plan activities through which objectives could be reached.

In response to the question "Does competency-based instruction place more or less pressure on you as a student?" eight graduate students felt more pressured with competency-based instruction because they knew what was expected; therefore, the responsibility for achieving was placed on them. Eleven students felt less pressured because they knew the objectives and materials to be used; thus, they could work at their own pace to achieve the objectives.

Twenty-six students felt that competency-based instruction placed more pressure on them. Those students said that the individual was on his own and this fact produced some pressures but many felt that this pressure was beneficial. Some felt that competition to pass pre-tests was high and thus produced pressure. On the other hand, forty-two students felt that competency-based instruction placed less pressure on them as students. These students felt that having the course objectives spelled out allowed them to feel relaxed, not to have to read the instructor's mind, and free to accomplish more at their own rate. They felt that the pre-test gave them a better opportunity to achieve the objectives.

When asked "Under which method do you think you would achieve more, traditional instruction or competency-based instruction?" two graduate students indicated that they felt that they would achieve more under the traditional method although they stated that a good student would achieve well under either method. Seventeen graduate students felt that they would achieve more with competency-based instruction because it gives an opportunity for research and independent study; in addition, each individual understands his responsibility.

Only five undergraduate students felt that they would achieve more with the traditional method because they got more out of a lecture and they "didn't dig studying too hard." Sixty-three students felt that they would achieve more with the competency-based method. They believed that they were more comfortable and were better able to understand the material. They noted that an added incentive was provided by the fact that this was a change from the usual method of teaching and gave a sense of being able to plan the time and do independent research on the materials which were listed for each specification. The clear cut objectives provided excellent guidelines for study and gave students something to work for. Several students thought the lecture method was boring and the competency-based was more interesting.

And finally, in response to the question "Under which method do you believe that you would receive the higher grades, traditional instruction or competency-based instruction?" two graduate students felt that they would receive better grades with the traditional method. Seventeen students felt that they would make better grades with competency-based instruction because better study habits were developed, the objectives and materials were spelled out, and the responsibility was placed on the individual.

Four undergraduate students felt that they would receive higher grades under the traditional method because it was easier and they got more out of lectures. Sixty-four undergraduate students felt that they would receive higher grades under the competency-based method. They felt that this was true because of the motivation, challenge, and the interesting opportunity to work on their own. They felt that the outlined objectives gave them an opportunity to be better prepared for tests.

SECTION XII: SUGGESTED RESOURCES

This the last section of the report provides a list of some of the resources which those involved in the program development effort described here found helpful as they developed their programs. Four types of resources are listed: (1) books, (2) mediated materials, (3) several persons most familiar with the notion of competency-based teacher education, and (4) a list of the Office of Education Model Elementary Teacher Education Project Phase I final reports.

Books

The following is a list of some of the books which program development specialists and project directors suggested were most helpful in their program development effort. The list should not be considered exhaustive but only a point of departure.

Arends, Robert L., John A. Masla, and Wilford A. Weber. Handbook for the Development of Instructional Modules in Competency-Based Teacher Education Programs. Buffalo, New York: Center for the Study of Teaching, State University College at Buffalo, 1971.

Burdin, Joel L., and Kaliopee Lanzillotti (eds.). Reader's Guide to the Comprehensive Models for Preparing Elementary Teachers. Washington, D.C.: American Association of Colleges for Teacher Education, 1969.

Flanagan, John C., William M. Shanner, and Robert F. Mager. Behavioral Objectives: Language Arts. Palo Alto: Westinghouse Learning Press, 1971.

Flanagan, John C., William M. Shanner, and Robert F. Mager. Behavioral Objectives: Mathematics. Palo Alto: Westinghouse Learning Press, 1971.

Flanagan, John C., William M. Shanner, and Robert F. Mager. Behavioral Objectives: Science. Palo Alto: Westinghouse Learning Press, 1971.

Flanagan, John C., William M. Shanner, and Robert F. Mager. Behavioral Objectives: Social Studies. Palo Alto: Westinghouse Learning Press, 1971.

Gronlund, Norman E. Stating Behavioral Objectives for Classroom Instructions. New York: The Macmillan Company, 1970.

- Kibler, Robert, and others. Behavioral Objectives and Instruction. Boston: Allyn and Bacon, Inc., 1970.
- Mager, Robert F. Preparing Instructional Objectives. Palo Alto: Fearon Publishers, 1962.
- Mager, Robert F. Developing Attitude Toward Learning. Palo Alto: Fearon Publishers, 1968.
- Mager, Robert F., and Peter Pipe. Analyzing Performance Problems. Belmont: Fearon Publishers, 1971.
- Meierhenry, W. C. (ed.). Mediated Teacher Education Resources. Washington, D.C.: American Association of Colleges for Teacher Education, 1970.
- McAshan, H. H. Writing Behavioral Objectives: A New Approach. New York: Harper and Row, 1970.
- Plowman, Paul D. Behavioral Objectives. Chicago: Science Research Associates, Inc., 1971.
- Popham, W. James, and Eva Baker. Establishing Instructional Goals. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1969.

Mediated Materials

The following are four sets of mediated materials which program developers found useful:

- General Programmed Teaching. Principles and Practice of Instructional Technology. Palo Alto: General Programmed Teaching, 1970. (Pre-recorded audio tapes, filmstrips, and workbook focused on various aspects of designing instructional systems; General Programmed Teaching, A Division of Commerce Clearing House, Inc., 424 University Avenue, Post Office Box 402, Palo Alto, California 94302.)
- Vimcet Associates. Vimcet Filmstrip-Tape Programs: "Educational Objectives," "Systematic Instructional Decision-Making," "Selecting Appropriate Practice," "Perceived Purpose," "Evaluation," "Curriculum Rationale," "Defining Content for Objectives," "Identifying Affective Objectives," "Analyzing Learning Outcomes," "Knowledge of Results," "Teaching Units and Lesson Plans," "Teaching of Reading," "Discipline in the Classroom," "Modern Measurement Methods," "Instructional Supervision," "Criterion Referenced Strategy," and "Experimental Designs for School Research." Los Angeles, Vimcet Associates, 1967-1970. (Filmstrips, pre-recorded audio tapes, and study guides; Vimcet Associates, Post Office Box 24714, Los Angeles, California 90024.)

Weber, Wilford A. "Competency-Based Teacher Education: An Overview." Westport, Connecticut: Videorecord Corporation of America, 1970. (115 35 mm slides, 22 minute cassette audio tape, and 12 page script which present an overview of competency-based teacher education and related issues; Wilford A. Weber, College of Education, University of Houston, Houston, Texas 77004.)

York, L. Jean. Team Teaching (Modules I through VII). Dallas: The Leslie Press, 1971. (A series of semi-programmed texts focusing on various aspects of team teaching; The Leslie Press, 111 Leslie Street, Dallas, Texas 75207.)

Persons

The list of people which follows contains the names and addresses of persons program development specialists and project directors identified as being of assistance to their efforts.

Dr. Hans O. Anderson, Associate Professor of Science Education, Indiana University, Bloomington, Indiana 47401.

Dr. James M. Cooper, Associate Dean, College of Education, University of Houston, Houston, Texas 77004.

Dr. M. Vere DeVault, Professor of Curriculum and Instruction, School of Education, University of Wisconsin, Madison, Wisconsin 53706.

Dr. Norman R. Dodi, Associate Professor of Elementary Education, College of Education, Florida State University, Tallahassee, Florida 32303.

Dr. W. Robert Houston, Professor of Curriculum and Instruction, College of Education, University of Houston, Houston, Texas 77004.

Dr. Charles E. Johnson, Professor of Education, College of Education, University of Georgia, Athens, Georgia 30601.

Dr. Howard L. Jones, Associate Professor of Curriculum and Instruction, College of Education, University of Houston, Houston, Texas 77004.

Dr. Jack M. Kean, Associate Professor of Curriculum and Instruction, School of Education, University of Wisconsin, Madison, Wisconsin 53706.

Dr. Walt Le Baron, Education Planning Consultant, Washington, D.C.

Dr. H. Del Schalock, Research Professor, Teaching Research,
Monmouth, Oregon 97361.

Dr. Wilford A. Weber, Associate Professor of Curriculum and
Instruction, College of Education, University of Houston,
Houston, Texas 77004.

Dr. Sam J. Yarger, Associate Professor, School of Education,
Syracuse University, Syracuse, New York 13210.

Model Elementary Teacher Education Project Phase I Final Reports

Program development specialists and project directors saw the Model Elementary Teacher Education Project Phase I final reports as being very helpful as they designed their program and built instructional modules. The models are available in honeycomb bindings from the Government Printing Office (GPO; The Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402) and in hardcover or microfiche from the ERIC system (EDRS, The National Cash Register Company, 4936 Fairmount Avenue, Bethesda, Maryland 20014). The reports available, their GPO and EDRS order numbers, and their prices are listed on the next page.

Report by:	GPO		EDRS		
	Order No.	Price	ED No.	Hard Copy	Microfiche
Syracuse University.....	FS 5.258:58016	\$4.50	026 301	.....	.....
Volume I.....	.....	.....	026 302	\$14.85	\$1.25
Volume II.....	.....	.....	025 495	13.55	1.25
University of Pittsburgh.....	FS 5.258:58017	2.50	.....	10.60	1.00
Florida State University.....	.....	.....	027 283	.....	.....
Volume I.....	FS 5.258:58018	2.00	.....	8.70	.75
Volume II.....	.....	.....	025 491	.....	.....
University of Georgia.....	FS 5.258:58019	3.50	025 492	14.85	1.25
Summary.....	.....	.....	.....	1.50	.25
Northwest Regional.....	.....	.....	.....	.....	.....
Educational Laboratory.....	FS 5.258:58020	6.50	026 305	.....	.....
Overview and Specifications.....	.....	.....	.....	7.65	.75
Appendix.....	.....	.....	026 306	.....	.....
A: Taxonomy of Learner Outcome.....	.....	.....	026 307	.55	.25
B: Conceptual Model for Teaching Elementary Math.....	.....	.....	026 308	1.70	.25
C: Content Model for Teaching Elementary Math.....	.....	.....	026 309	1.70	.25
D: Sample Task Analysis and Behavioral Objectives.....	.....	.....	026 310	.70	.25
E: General Adaptive Strategies.....	.....	.....	026 311	1.25	.25
F: Interpersonal Competencies.....	.....	.....	026 312	.40	.25
G: Basic Training Model for ComField Practicum.....	.....	.....	026 313	.45	.25
H: Sample Task Analysis: Behavioral Objectives for ComField Laboratory.....	.....	.....	026 314	.65	.25
I: Experimental Model for Preparing To Develop Behavioral Objectives.....	.....	.....	.....	4.50	.50
J: Experimental Model to Enable Instructional Managers To Demonstrate Interaction Competency.....	.....	.....	026 315	.....	.....
K: Trial Form of an Instrument for Evaluating Instructional Managers in the Practicum.....	.....	.....	026 316	1.40	.25
L: A Sequence for the Practicum.....	.....	.....	026 317	.45	.25
M: Research Utilization and Problem Solving.....	.....	.....	026 318	.60	.25
N: Implementation of Rups System In a Total School District.....	.....	.....	026 319	3.20	.50
O: The Human Relations School.....	.....	.....	026 320	2.20	.25
P: Categorical Breakdown of Interpersonal Area.....	.....	.....	026 321	1.05	.25
Q: Educational Leaders Laboratory.....	.....	.....	026 322	.30	.25
R: A Basic Communication Skill for Improving Interpersonal Relationships.....	.....	.....	026 323	.30	.25
S: Broad Curricular Planning for the ComField Model Teacher Education Program.....	.....	.....	026 324	.75	.25
T: Personalizing Teacher Education.....	.....	.....	026 325	.85	.25
U: Self-Concept and Teaching.....	.....	.....	026 326	.55	.25
V: Charting the Decision Making Structure of an Organization.....	.....	.....	026 327	.70	.25
W: Cost Analysis In Teacher Education Programs.....	.....	.....	026 328	.80	.25
X: ComField Information Management System.....	.....	.....	026 329	.80	.25
Y: The Integrated Communications Experiment (ICE) Summary.....	.....	.....	026 330	.75	.25
Z: Classes of Measures Used In Behavioral Sciences, Nature of Data that Derive from Them, and Comments as to the Advantages and Disadvantages of Each.....	.....	.....	026 331	.....	.....
Teachers College, Columbia University.....	FS 5.258:58021	4.50	027 284	.40	.25
University of Massachusetts.....	FS 5.258:58022	4.50	025 490	26.95	2.00
University of Toledo.....	FS 5.258:58023	7.00	.....	26.65	2.25
Volume I.....	.....	.....	025 457	.....	.....
Volume II.....	.....	.....	025 456	12.80	1.00
Michigan State University.....	.....	.....	.....	34.85	3.00
Volume I.....	FS 5.258:58024	5.00	027 285	.....	.....
Volume II.....	FS 5.258:58024	5.50	027 286	31.35	2.50
Volume III.....	FS 5.258:58024	5.00	027 287	37.95	3.00
.....	.....	.....	.....	29.65	2.25